THE MAGAZINE FOR DATAEASE USERS

AUGUST 1995

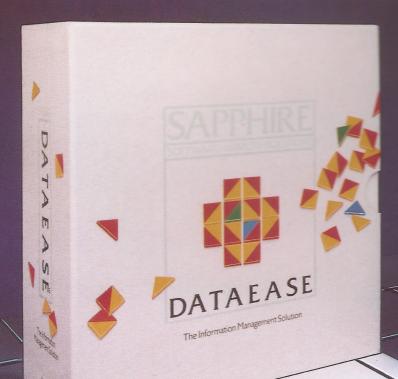
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# Don't talk to yourself Talk to each other

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Written by DataEase Users. For DataEase Users.



s searching for a solution a solitary process? Is yours a road well traveled, or are you trailblazing? Novice or seasoned programmer, wouldn't it be great to share your adventures — and your nightmares!

#### Let's have some Dialogue

Dialogue is an independent magazine about DataEase, written by DataEase users.

People who have used the program for a good few years. Who understand its workings and — more importantly —

how it can solve their business needs.

These DataEase professionals have written in Dialogue about networks, printers, good database design, client/server, multi-media, barcoding. Tricks that keep the users happy and the data valid. Elegant solutions that make you feel good about your work and yourself.

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For six years we've helped over 2,000 developers in a wide range of organizations throughout the world protect the time and money they've invested in DataEase.

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Editor, Dialogue Magazine



### DIALOGUE

THE MAGAZINE FOR DATABASE USERS

No matter how big or small your organisation, how complex or simple your database requirements, how advanced or basic your DataEase skill, you'll find plenty of value in each issue of Dialogue.

Dialogue is the international magazine that deals exclusively with DataEase matters. Not just form design and DQL techniques, but also connectivity and printer problems. Windows and CDFs. We'll recommend what products you should use as part of your technical tool kit. Our case studies will show you how other people have solved information issues.

#### INFORMATION FASTI

Your time is precious. You want answers quickly, and to put the solution into practice. To help you, we have two editorial targets.

- 1. **Keep it clear.** We clarify techniques, reduce unnecessary jargon.
- 2. Break it up. Pages full of text can be a nightmare do you have to read every word to uncover the gems inside? We put key topics into highlighted boxes to get you straight to the heart of the matter:

#### FOR ALL USERS

Newcomers to DataEase need not worry that Dialogue is "above their heads". We make sure that whatever your expertise and experience — Novice, Intermediate, and Expert — so that whatever your level of competence, you'll find something of worth.

#### The DataEase User Group

Dialogue began life as, and continues to be, the magazine for the UK-based DataEase User Group Ltd (DUG). DUG is an independent organisation that represents the needs of the DataEase community to vouchsafe their investment in DataEase.

# Contents

**AUGUST 1995: "HACKING HACKERS** 

#### REGULARS

<b>Update</b> DfW in Brazil; New User Group		4
<b>Comment</b> The Elegant Solution		20
Feedback Numbers as words; Numeric	cal so	rt-
ing; and much more	21-	26
In-Touch International User group info	·	39

#### **COVER STORY**

#### **Keeping Honest People Honest....9**

Graham Smith knows that if someone wants to break into a system — they probably will. So what is the point of DataEase security levels?

#### Passing Words ...... 12

Malcolm Bolton goes random password generating crazv.



#### DIALOGUE TECH

First shall be Last	
Sub forms in reverse EXTENDED date order	. 17
Cake and Eat It	
Thought choice fields were limiting?	
Think again!	. 17
Speed Up Your Searches	
Cat the record quicker with non-indexed fields	16

#### SPECIA

Let's Get	Together				
It's conference	e time again,	on both	sides	of the	

#### **PRODUCTS**

Called to Account
Overviews of two new major accounting applications
one in DataEase, the other with DataEase connection
Chart Art 2
A new version of development tool Application Charte is out, complete with Windows front-end.
Laser Sharp
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PLUS: Buyer's Guide 3
Full list of all existing DataEase add-ins, books, video and their suppliers. And news from the product world

#### QUERY BY MODEL

Graham C. Smith4
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- **CONTRIBUTIONS** If you have an idea for an article, please contact Adrian Jones. We are particularly interested in your experiences with DataEase for Windows and DOS 5. If you have any comments about this magazine, about DataEase or other computing issues, please get in touch at the above address.
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# Quiet on the Western Front

s it just me, or is there an uneasy silence out there? Are we holding our breath waiting for the arrival still on for September, the last I heard - of the usable, stable, DataEase 5.1s? Or have I worked on this magazine too long, and am going slightly crazy at last?

What is this silence of which I speak? Well, first there is an 'article' silence. Getting hold of anyone who feels confident enough to write about either series 5 product is

In fact, I must offer a big thanks to Richard Laidler of Alt-F1 Consultancy in England. He has truly come to my rescue with three contributions, one for DfW, one for DOS 5, and the third a general article.

But apart from that, I have to say that there aren't people queuing up at my door with manuscripts in hand, presumably because few have explored what the new products offer — or try to offer — with much suc-

DataEase itself is keeping fairly mute. What I find interesting is that September deadline. In the past, they've announced releases as "this or that quarter", and then still missed it. A month is three times more accurate — and therefore barder to bit — than a quar-

ter. And yet there is no 'um'-ing or 'ab'-ing, no shuffling of feet. Could it be that they are going to make it?

I bear rumours to confirm this. That — a drum roll here, please - they may even get a new

release out earlier than the end of the ninth month.

Should this be the case, it will be great news for the IDUA conference in Wilmington, DE, at the end of September. Maybe it is this event that is setting the agenda. Two major conferences (the other by DUG in London) within a month of each other, attended by the keenest of North American and European developers and users, certainly sounds like good motivation to get the upgrades

I am reminded, of all people, of the Beatles. They'd released Revolver, followed by the Strawberry Fields/Penny Lane single, and then were quiet for six months or so, a long time in the pop world in those days. The media was rife that they'd lost it, that the seams in the gold mine they'd been digging were now deplete. And then, on June 14th 1967, they released Sgt Pepper...

Okay — I stretched that analogy a little. But despite the recent resizing of the company, I understand that the staff, at least in the UK, are well motivated, and I wouldn't be surprised if they do pull the stable, usable new version of the new products out of the bag next month.

Then these pages will be flooded with long-time DataEase fans sharing with us all about the new features

> and workarounds and tip and tricks and tracks. And the uncertainty of the bast six months will be behind us all.

Adrian Jones. Editor Dialogue



#### **New Benelux User Group**

A new user group with the wonderful acronym of DEBUG has been launched in the Benelux countries of Belgium, Netherlands and Luxembourg.

At the moment, the group offers a free full-time help desk, named by volunteers. They plan to hold meetings and workshops, again free to members, every six months, with maybe more frequent ones for a slight additional fee. A quarterly magazine (in Dutch) helps the members keep abreast of what is going on.

They are compiling an application pool, and are also acting as a DataEase job centre for the region. DEBUG can act as a focus point for users wish-lists, as a consolidated presentation of users needs will have a much greater impact than individual requests. This is an important area, as all too often it is the English and American users who make the most noise and get their wishes fulfilled.

They also want to promote DataEase better throughout Benelux, including some clever marketing ideas. Part of this will involve a Programming Contest to see who can develop the best applications fastest.

· For more information, contact Dennis E. van de Spoel on +31 (0)2154 24570. They have an Internet address — debug@knoware.nl although at the time of writing it was not confirmed that this was live.

#### DataEase in Brazil



DataEase for Windows has made its way to sunny Brazil, the land of carnival, samba and the world's most excitable football commentators.



DataEase's Brazilian distributor, Equaçao Informática Ltda, has brought the package out in the country's official language of Portuguese. They held a successful press launch which attracted several journalists from national newspapers and magazines.

Directors Sidney Passos, Luis Cesar and Reinaldo Neves foresee a major impact on the Brazilian database market, and are confidently predicting a 15% increase in their customer base.

The company is also currently negotiating the sale of the Portuguese Windows version on the other side of the Atlantic, to Portugal.

• Dialogue readers will remember that Equação Informática director Sidney Passos was featured in our "Query By Example" inside back page section in the April issue this year. He is also the author of two CDFs, ExternalLookup, which retrieves data from another DataEase 4.53 database, and NoMenu, which controls the user interface for DataEase Express.

For more information, contact Equação Informática on +55 11 221 3415.

#### **Lost in Cyberspace**

In case you haven't heard...
For about two weeks at the beginning of July, the normally active CompuServe forum fell very quiet.

One prominent member had been 'elf-ed' (locked out of the forums) for reasons never made exactly clear, but that surrounded comments he may or may not have made at a computer show.

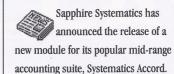
The details are not worth dragging

over, but what was interesting was the almost complete decamping to another forum — to wit, the IBM PC Applications forum. Suddenly CompuServers had to log on to a completely different section, and shift through all the non-DataEase related messages, looking for those ones that mattered.

In reality, though, this was no big deal. It seemed that scarcely anyone used the forum section anyway.

Those that did must have wondered what had hit them. It was as if a flock of migrating geese suddenly landed in some deserted part of the world, made a lot of noise, and moved on just as suddenly. What might have amused them even more was that several DataEasers answered their questions for them as well, and even encouraged them to use a different database package to the one they were already using. Can you guess which one?

#### Seminars for Sales Order Processing



They will be running two seminars for managing directors, financial directors and IT managers, highlighting two important features of Systematics Accord. The first is entitled "Microsoft Office and Systematics Accord for seamless integration", the second on "Btrieve and ODBC for a truly Open System".

The launch of a complete upgrade to the suite — 7.4 — significantly extended the scope of this software, already well known for its power and simplicity of use, and quick, easy links to DataEase and other database packages.

• For more information call Helen Stillman on +44 (0) 181 553 3720. The Sales Order Processing Module is previewed on pages 27-28 of this issue.

# Early Bookers Save

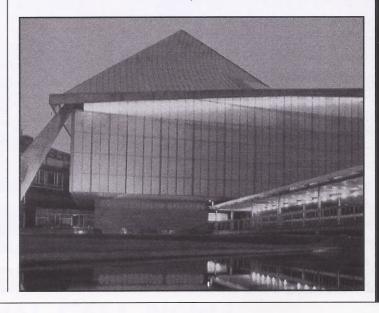
They've only just got the publicity material back from the printers, but already demand is high for this year's DataEase User Group conference. Bookings are being placed as would-be delegates want to take advantage of the early booking discounts.

The price is being held at just £295, £10 more than last year's fee for a third more track sessions, key note speeches and overall conference. But this lasts only until the end of August; from September 1st the price is increased to £320 per delegate.

The conference is being held at the Commonwealth Institute in London, on Monday 30th and Tuesday 31st of October. This will be the fourth conference organised by the DataEase User Group, though it is the first in the capital.

• For more details, contact Marion or Becky on +44 (0)1603 762806. See also the article by Adrian Jones on both DUG's and IDUA's ensuing conferences, on page 6 of this issue of Dialogue.

The Commonwealth Institute, High Street, Kensington, London, host to the DataEase User Group 4th European Conference, October 30-31st.





#### **CONFERENCES**

# Let's Get Together

Whether you call it Fall or Autumn, DataEase conference season is just around the corner, says **Adrian Jones** 

for us this Autumn. The first, in Delaware, USA, in late September, is followed a month later by the DataEase User Group's fourth European Conference in London. But what do these conferences offer you? Last year I was lucky enough to get to both, one of only a handful of people to do so. So permit me, if you will, to make some observations.

Neither is run by DataEase itself. DEI has and will lend support to both, through committing key personnel to speak, and also through making the marketplace aware of them and that they are worthwhile attending.

But the focus is on the needs of the user — that is, you. They are not dressed-up sales pitches; they are ways to help you get to know more about both the product and how other people use it.

This last year or so has been an interesting time for the DataEase community. At both IDUA and at DUG's Nottingham gathering last year, DEI sold a vision of the products to come, and we were excited. Since then, what actually came on the market has disappointed many. We now look forward to a 5.1 release, planned for September. Thus both conferences this year could involve what we all hope will be stable, usable releases.

#### **What Happens?**

Both conferences, not surprisingly, have similar formats. A set of simultaneous track sessions, where smaller groups of people can listen to (and ask questions of) someone with particular expertise, are contrasted against more formal keynote presentations, some by top people in DEI, others by 'observers' such as academics and journalists.

To let you attend everything, IDUA is running eight track session, with each topic repeated once. With DUG, you will have to choose. From both, you'll get a huge folder containing notes from all the presenters. Dialogue may use topics from either event as starting points for future articles.

The American conference is on for longer (including a weekend), and is a bit more relaxed than DUG's (less suits, anyway). The weather will be better, although, frankly, you're in an air-conditioned hotel for most of the time and won't notice what is going on outside. Either is a great chance to develop business alliances, friendships and even romance. If you can attend both, I'd thoroughly recommend it

Both organise social events,

providing more opportunity to meet with other users. In the past DUG has arranged an evening extravaganza (punting and dining in Cambridge in '93; a Robin Hood banquet in '94). Something similar is planning something for this year. There are Vendor's fairs, where you can explore the services and products offered by DataEase related companies. This year DUG introduces Special Interest Groups; planned subjects include marketing vertical applications.

#### Who Are These Experts?

Many DataEase experts found DataEase a great way to address a need, mastered the software, explored the boundaries and uncovered ways to get beyond any apparent limitations. So they know what happens when you run DataEase over various different networks, how to get the best possible output on a printer, or how to integrate with multi-media.

If you've been using DataEase for a while, chances are that these experts sound like you. And that's a central benefit of these conferences; they are a chance to engage with your peers. You'll feel saturated, invigorated, excited, and, most probably, exhausted. If you go, DataEase discussions will take over your life — Coffee breaks, lunch, in the bar and at the evening entertainments. There isn't even a curfew over breakfast.

Which ever way, if you have or are about to spend time and effort creating successful, well-built applications, you'll find the conference you attend a superb battery-charge for your creativity and enthusiasm.

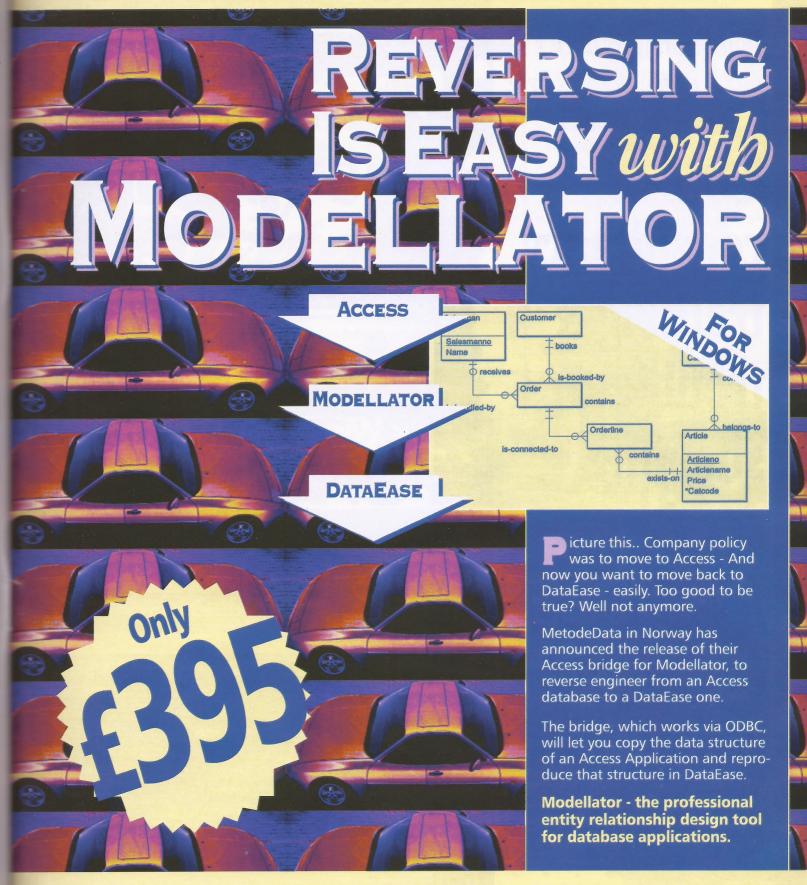
#### WHAT AND WHERE

The IDUA conference is from 21st-24th September at the Holiday Inn, Wilmington, Delaware, USA. Philadelphia airport is about half an hour's cab ride away. Wilmington is on the DC to Boston Amtrak service. Cost \$325 including meals but not accommodation. Call Debe Winkler on (302) 984-2698 for registration. For special hotel rates call (302) 655-0400, and for air fares try (800) 289-3359. Europeans interested in attending should contact Rob Hill at TrainEase on +44 (0) 1268 270022.
 The DUG European Conference is from 30th-31st October at the

• The DUG European Conference is from 30th-31st October at the Commonwealth Institute, Kensington High Street, London, England. Cost (to DUG members/Dialogue subscribers) £295 if pre-paid by 31st August; £325 thereafter. Non-members also welcome. Call Marion Forsyth on +44 (0)1603 762806. Accommodation extra. • Exhibition space for your products and services is also available at both conferences. Call Debe or Marion respectively for rates and info.



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#### **COVER STORY: SECURITY**

# Keeping Honest People Honest

First in a series on making your application a safer place to be, by Graham Smith

nyone who has had a car stolen or their house burgled can tell you, "Locks only keep honest people honest." This fact is also being driven home to both government and business as the rate of computer system break-ins continues to rise.

During the 20 years I was in the Army, I only had two jobs that involved classified materials. The first one was before the advent of PCs (boy, is this guy old!), but the second one was in the late 80s, during the explosive growth of desktop PCs and small networks. At that time, we had a very simple solution. Classified data never went on your hard drive. Period. We either stored the information on floppy disks or on removable drives like a Bernoulli Box. You took things out of the safe, worked on them, and put them back in the safe. Clean and simple.

Many businesses today are faced with similar problems trying to protect sensitive information. Unfortunately, the problems today are nowhere as clean and simple to solve. If you have really sensitive data, the best thing I can suggest is to do exactly what we used to do in the Army; put it on a removable data cartridge. That means you are confined to a single user system. As soon as you put it on a network, you have to start worrying about who is trying to get a look

Unfortunately, there is little you can do to protect your information from prying eyes once you put it on a network. You can encrypt your files all you want, but encryption is made to be broken.

In fact, some people consider it a challenge. So if we accept the fact that there are limits to what we can do, what do we need

DataEase security for?

The answer is to keep the honest people

honest. To put some controls on what a user can do rather than simply letting them roam free and do as they please. I guess the best place to begin is with the security you can establish when a user logs in.

#### On The Level

One of the fields on the System Users form is Security Level. By default, this level is high, which means you can do anything. The security can also be set to one of six other levels, three medium and three low. The three medium levels are the same as far as DataEase activities are concerned; same with the three low levels. The table shown here gives an overview of what each security level can do.

In addition to the basic restrictions DataEase sets, you can also modify the form and field properties to specify which of the seven security levels can view, enter, modify, or delete records. This can even be

extended down to the field level view and write security (which takes precedence over the form values).

These properties even extend to QBEs that are created by the user, and to Print Record (Sh-F9), but they do not extend to pre-defined reports.

What is sometimes misunderstood is how these security rules extend to reports and procedures. A user can run any pre-defined procedure, no matter what it does, regardless of their security level — if they can gain access to it. This last caveat is the key to preventing much confusion and grief.

If a medium level user is in record entry, they can bring up QBE with F9 and write and execute a QBE (list records) report. They may not change that report to a DQL and may not load or run a predefined procedure.

This means that

have access to the DataEase

Main Menu, they can only run those procedures that are on their menus. However, if a Low3 user has a procedure on their menu that deletes all the records in the Accounts Receivable form, they can run it regardless of the security levels in the form. In other words, a procedure acts according to the security level of the person who wrote it or the person who is running it, which ever is higher!

This makes it very important to keep people away from the DataEase Main Menu unless they have a specific need to be there. The simplest way is to not put the DE Main Menu as a choice on any menus. Create one Administrator that bypasses all menus and goes direct to the DE Main Menu. Everyone else, gets a menu. This one simple step is often the solution to a myriad of complaints.

What most people want when they speak about security is to either prevent users from accidentally changing or deleting things, or to keep users away from data they have no need to see. One way to control that is grouping things together on menus by

9



security level and restricting access on these menus to that security level. Remember, you can create seven functional groups of users based on security code. If you are consistent in how you apply security levels to forms and fields, you can do quite a bit in the way of control.

For example, you can create a group of users with a Low3 security level. You can restrict this group from doing anything but looking at the information you want them to see. You can do this with a number of forms and put them on a menu for use as "Information Only".

A simple trick for controlling deletions is to increase delete security in forms from Medium3 to

High. Put a single integer field (called "DeleteMe" or "Kill" or a similar descriptive name — but not just

"Delete" which is a reserved word) on each form with

a derivation formula of: if(DeleteMe = blank,

blank, 1). You can then set up a procedure that can be run by the supervisor to review the deletions (those records with a '1' in the field), prior to deleting them with a batch procedure.

Put a data-entry form at the front of every procedure that tells the

user what the procedure is about to do. Nothing is more frustrating than someone running the wrong procedure when it could have been avoided by a simple warning. You can also take this one step further through the use of a little known function current user level.

The current user level function will return an integer value from 1 to 7 with 1 being High security level and 7 being Low3. Yes, I know, the numbering seems backward with the lowest number being the highest security. I can assure you, it wasn't my idea.

You can use the current user level in reports and fields to check a users security level. If you create a required field on a data-entry form that blanks out if current user level doesn't equal 1. Then only a high level user will be able to run the report.

#### **Extending Security**

This same idea can be extended to processing procedures and reports that may do different tasks depending on the user level. For example, a report can be set up to print information with output statements. Which output statements execute can be varied based on user level. So while a high level user may get a complete report with all the detail, a low level user may only get summary information.

Once you start thinking about it, you will find that there are several things you can do simply by making use of the built-in DataEase security levels.

Unfortunately, one of the better features in a DataEase database can also be a hindrance when you are trying to control access to data. This is the ability users have to move from form to related form with F10. This feature alone can torpedo many attempts to restrict access to data.

In the next article, we are going to move beyond some of the limits imposed by DataEase security and get into some more innovative techniques such as Group Level Security and add-on products.

- **USER SECURITY LEVELS** High Medium Low **DataEase Activity Access System Configuration Form Access Other System Forms Define Menus Define or Modify Forms** Define, Modify, or Delete Relationships View Relationships **Modify Existing Procedures Run Existing Procedures** Create New Procedures 3 4 Enter, Modify, or Delete Records View Records Import Data Transfer Data **Backup Database** Y **Restore Database** View Database Status Other Maintenance Functions Other Utility Functions
- (1) Users with medium security levels can modify the Configuration record for their workstation. Users with high security levels can also modify the Database Configuration record.
- (2) When accessing DQL procedures from record entry, DataEase lets only users with high security level load or run existing procedures. Procedures may be run from custom menus, or by selecting DQL Advanced Processing from the Main Menu.
- (3) Users with medium or low security levels can define and run new procedures, but cannot save them.
- (4) The minimum security level for entering, modifying, deleting, or viewing records can vary between forms, depending on the values specified on the Form Properties screen.
- Graham C. Smith is a DataEase Certified Expert and Vice President of PLM Consulting, Inc. He has worked with DataEase since version 2.5 and has experience with a wide variety of standalone and networked applications. He can be reached at PLM Consulting, Inc., 816 Washington St., Wilmington, DE 19801; Phone: 302-984-2698; e-mail to CompuServe user ID 74010,764.



The Elegant Solution

# DataEase User Group 4th European Conference

The DataEase User Group's 4th European Conference is a convention for the DataEase community where enthusiasts can meet and share experiences.

Arranged by the independent DataEase User Group, it's an open, honest forum focused on the needs of DataEase developers and users.

It's the only chance you'll get to find so many keen users in one place, all discussing DQL, indexing, Windows, security and whatever else bugs or excites you.

If DataEase is part of your working life, you simply cannot afford to miss this unique event.

To book or for further details of the 1995 DataEase User Group European Conference, contact Marion Forsyth on 01603 762806.





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#### **COVER STORY: SECURITY**

# Passing Words

Malcolm Bolton goes password crazy

was recently asked to do something that I thought was totally unnecessary and even down right silly. But sometimes one has to swallow one's scruples and just get on with the mindlessness. I was about to embark on a journey of such mind bending proportions that I would never be the same again.

They wanted a random password generation system. Apparently most computer fraud is perpetrated by people who use the system daily. Once they get hold of a colleague's password, all manner of unpleasant things can happen. Or so I was told. Apparently most passwords are very easy to guess — once you know a little about the person. Girlfriend, boyfriend, husband, wife, family pet, brother or sister, famous sportsman, it is not very hard to break. In fact it is all too easy...

At last convinced this was a worthy cause, I set to it with a vengeance. The spec was quite simple. Create a system that will insist on you changing your password every four weeks. The password must be easy to remember. The system will randomly generate one hundred suggestions to choose from. The system manager must not be able to guess the passwords, the number of words used in the password should be user selected and the length could be up to 40 characters.

The DQL I am about to describe does some of this. Since, as DataEase users you are primarily interested in producing eight character, non case dependent passwords, I have geared the DQL to achieve that.

#### **Building the system**

Here's how you start. Create a form WordSource with two fields: Code (numeric string, indexed.

sequence from 0001, prevent-entry), and Word (text, 12 characters). Populate the form with as many words as you can think of. You will need at least 200 to 300 for the final system. Don't make the words too obscure or no one will remember them. Don't use colleagues names as the juxtaposition of words might cause consternation to a particular individual. Keep the words short. There will be a minimum of two words and there are only eight spaces so I'm afraid that Supercalorfragilistic is out, at least as a DataEase

Finally, write the DQL in Figure 1.

#### **How it works**

We generate a random numeric string within the range in the WordSource form. This code looks up the word in the record.

The DQL function random creates a floating point number between 0 and 1. We need to convert this number into an integer between 1 and the maximum number of words we have in the form, so it is important that you never create gaps in WordSource by deleting records.

We find out how many records are in WordSource using the relational operator 'count of':

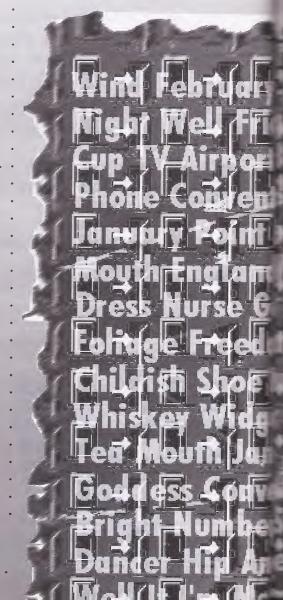
assign temp tNoOfWords := count of
WordSource .

A variable let's us use this value throughout the DQL without re-counting the number of records in the form. This will make the DQL faster and more robust.

Next we convert this floating point number to an integer, using the ceil function:

assign temp tCode1 := ceil(random () \* temp <math>tNoOfWords).

Now we must get the associated word for that code. I have created a variable associated with Code1 named Word1. Now I need to assign to that variable the correct word. Most of you would say, "Well that's easy, simply use the relational operator





```
'any'." I thought so, too. i.e.:
```

```
assign temp tWord1 := any WORD named
"rW1" with (Code = temp tCode1 ) Word .
```

The 'any' operator works as expected when inside a 'list records', but when outside a 'for' loop it simply sticks at the first value of the

> >>> Run Milk >>> WellHour

>>> Boy Bird

>>> I'm Pain

randomised code --- even Random eight or less letters: after the word code has changed! Another method >>> CanCloud >>> 2 Ankle had to be found.

'for' loop. But remem-

using a

- . ber to end the loop or you will get some very interest-
- ing results!
- for WordSource with code = temp tCode1 ; assign temp tWord1 := Word . end
- Although it may seem a bit of overkill, this does work.

This technique can gather all the randomised words you will need. In the DQL I simply name then

- Code1-Code4 and Word1-Word4.
- Reduced to two lines the central "engine" looks
- assign temp tCodeX := ceil(random () \* temp tNoOfWords ) .
- for WordSource with code = temp tCodeX
- ; assign temp tWordX := Word . end
- If we do this twice we will get two random words.

#### Figure 1: PASSWORD GENERATOR FOR DATAEASE ...

```
define temp "tCode1" numeric string 4 .
  define temp "tCode2" numeric string 4 .
 define temp "tWord1" text 8 .
 define temp "tWord2" text 8 .
define temp "tPassword" text 16 .
define temp "Kount" number ...
define temp "tNoOfWords" number .
```

assign temp tNoOfWords := count of WordSource .

```
while Kount < temp tNoOfWords do
 assign temp tPassword := "A Very long password to make the loop trigger".
  while length(temp tPassword) > 8 do
   assign temp tCodel := ceil(random () * temp tNoOfWords ) .
    for WordSource with code = temp tCode1 ;
     assign temp tWord1 := Word .
    end -- for WordSource ...
   assign temp tCode2 := ceil(random () * temp tNoOfWords ) .
    for WordSource with code = temp tCode2 ;
     assign temp tWord2 := Word .
   end -- for WordSource with code = temp tCode2 ...
   assign temp tPassword := jointext(tWord1,tWord2) .
    if length(temp tPassword) < 8 then
      if length(temp tWord1) > length(temp tWord2) then
       assign temp tPassword := jointext(temp tWord2 , jointext(" ", temp tWord1)
       assign temp tPassword := jointext(temp tWord1 , jointext(" ", temp tWord2)
     end -- if length (tWord1) > length (tWord2) ...
     if length(temp tPassword) = 8 then
       if length(temp tWord1) > length(temp tWord2) then
         assign temp tPassword := jointext(temp tWord2 , temp tWord1) .
       end -- if length(tWord1) > length(tWord2) ...
     end -- length(temp tPassword) = 8 ...
    end -- length(temp tPassword) < 8 ...
    if length(temp tPassword) <= 8 then
      list records
       tCode1 ;
       tCode2 ;
       tWord1 ;
       tWord2 :
       tPassword .
   end -- if length(temp tPassword) <= 8 ...
 end -- while password > 8 characters ...
 assign temp Kount := Kount + 1 .
end
```



Wint February Calculus Hast
Night Well Fridge Speaker
Cup IV Airport Betta
Phone Convent Bettle Thru
January Foint February Funtas
Mouth England Whole Apple
Dress Hurse Get Month
Foliage Freedom Easy Hun
Childish Shoe Nun Saw
Whiskey Widget Hury Bay
Jea Mouth Jane Mellow
Goddess Covery Moot Volcon
Bright Number Stormy Dirty
Dancer Hip Angel Misspell
Well II I'm Mother

We can make them into a single word by simply using jointext:

assign temp tPassword := jointext(temp
Word1,temp Word2) .



- So now we can generate two random words. But what
  if one of them is say, five characters and the other
- four? This will make it too long for a DataEase pass-
- four: This will make it too long for a DataEase pass
- · word. The solution is very simple. Use a 'while' that
- waits until the password does not exceed eight letters:
- while length(temp tPassword) > 8 do

Inside this loop you will see the code for selecting and jointexting the password. If the password is longer than eight characters the while loop will simply discard it and try again! Easy! — But very powerful.

Just to make the solution a little more interesting, let's say that we always want the smaller word at the beginning. If the resulting password is less than eight characters long that we would also like a space between the words.

First we need to test the length of the string:

if length(temp tPassword) < 8 then

- · If the first word is longer than the second, reverse
- them. Since we are testing if it is less than eight characters, add a space between the words.
- if length(temp tWord1) > length(temp tWord2) then
- assign temp tPassword := jointext(temp
  tWord2 , jointext(" ", temp tWord1)
- However, the words are already in the right order then simply add the space.
- else assign temp tPassword :=
   jointext(temp tWord1 , jointext(" ",
   temp tWord2)

Next we need to deal with any password of eight or more characters by using the else command. We want only with those that are eight characters:

if length(temp tPassword) = 8 then

and then we can apply the same logic as above. However, this time we do not have to put the space between the words, so that if the words are already in the correct order we can leave the password alone.

if length(temp tWord1) > length(temp
tWord2) then assign temp tPassword :=
jointext(temp tWord2 , temp tWord1) .

All that remains is to print out the results and tidy up the end of the procedure. First of all discard any password that is greater than 8 characters long because we don't want to see them.

if length(temp tPassword) <= 8 then
list records</pre>

Don't forget to end the last 'while' statement. You may remember that we wanted a list of passwords to choose from. What I have presented so far will only give a single password. All that we need to do to achieve this is to envelope the procedure in another loop. For this we need a variable to count how many times we have been round the loop. I want fifty passwords to choose from:

while Kount < 50 do

Remember to increment the Kount variable

#### **MEMORISING LONG PASSWORDS**

Strangely enough it is often easier to memorise a list of more than two words. According to Tony Buzan's book "Use Your Memory", the more absurd or humorous the associations you can make with the list, the easier you will remember it. Building up an absurd series of events around the randomised words will make it almost unforgettable, but remember, don't chuckle every time that you type in your password!

Here are a few four word passwords from the output of the DQL:

- >>> Ready Door Apple Island
- >>> Flower I'm Porpoise Easy
- >>> Airport Bright Bright Orange

How on earth can you remember any of these? Let's try an little visualisation.

#### How to memorise "Ready Door Apple Island".

"Think of yourself standing eagerly by a door. You are desperate with anticipation. You are very hungry, almost starving. You are ready to risk life and limb to get some food. The door is 30 feet high and made of solid bronze. It is glittering in the sunshine and blinding your eyes so that you have to squint. How on earth anyone could open such door — it is so large and heavy. The thing you crave most — you would even risk eternal damnation — is an apple (This one has been done before, folks!) You have had enough of PC s and have finally succumb to the temptation. But you know that you will be pursued by all your colleagues and your family will disown you if you give way to your craving. There is only one solution. Once you have got the apple you must escape to a desert Island. Here it is safe to indulge your craving. You can see yourself sitting on a desert island, in the sun, under a palm tree with your apple. You are ready, to open the door, grab your apple and escape to a desert island."

Of course you should make your own version. Strangely enough the more often that you associate such random words in this way the easier it is to do and the better you will remember it. Yes, you have guessed, the life of the chairman of the DataEase User Group is full of stress and strain, he has finally flipped and got completely over to the other side.. But he can remember his passwords!



And that's it. Notice that designing a DQL often means working from the inside out as you enclose the central code in various controls like the number of records to print.

I have an extended version of the password generation that you may find easier to remember even though they are longer. A data-entry screen allows the following options: up to four words in the password; remove spaces between words; disallow numbers in the passwords; randomise the case of the password. This last option is only to be used by the memory masters or the full blown sadists amongst you.

define temp "tCodel" numeric string 4 .

#### **FURTHER READING**

Buzan, T : Use Your Memory, BBC, London 1993 ISBN 0 563 208147

Freud, S : Psychotherapy and the Generation of DataEase
Passwords: There is a cure. Unpublished,
Paris 1899.

Finally, I have a version for DataEase, not included here, which produces an eight letter mnemonic that is totally impenetrable to anyone else but yourself (after you have read Tony Buzan) — unless of course you spend an hour or two explaining what WSX4WERA means to you and why. By that time you will probably

be in the psychiatrist's chair. Have fun.

 For reasons of space, all comments have been removed from the DQL shown. A sample application has been posted to the DataEase CompuServe forum with the comments intact.

Random four-word passwords:

Random four-word passwords:

>>> Bag January Bird TV

>>> Pool To Flower Clean

>>> Shoe Shirt Free Banana

>>> Hat Silver TV DataEase

>>> Hat Silver TV DataEase

>>> Japan Day Friendly 2

>>> Japan Day Friendly 2

>>> Strange Plant Bright

>>> Cricket

#### Figure 2: ... AND FOR NON-DATAEASE SYSTEMS

```
define temp "tCode2" numeric string 4 .
define temp "tCode3" numeric string 4 .
define temp "tCode4" numeric string 4 .
define temp "tWord1" text 12 .
define temp "tWord2" text 12 .
define temp "tWord3" text 12.
define temp "tWord4" text 12 .
define temp "tPassword" text 55 .
define temp "Kount" number .
define temp "CharKount" number .
define temp "tNoOfWords" number .
assign temp tNoOfWords := count of WordSource .
while temp Kount < data-entry NoExamples do
 assign temp tWord3 := blank .
 assign temp tWord4 := blank .
 assign temp tCodel := ceil(random () * temp tNoOfWords ) .
  for WordSource with code = temp tCodel ;
   assign temp tWordl := Word .
 end -- for WordSource with code = temp tCode1 ...
  assign temp tCode2 := ceil(random () * temp tNoOfWords ) .
  for WordSource with code = temp tCode2 ;
   assign temp tWord2 := Word .
  end -- for WordSource with code = temp tCode2 ...
  if data-entry NoWords > 2 then
   assign temp tCode3 := ceil(random () * temp tNoOfWords ) .
    for WordSource with code = temp tCode3 ;
     assign temp tWord3 := Word .
   end -- for WordSource with code = temp tCode3 ...
 end -- if data-entry NoWords > 2 ...
  if data-entry NoWords = 4 then
   assign temp tCode4 := ceil(random () * temp tNoOfWords ) .
    for WordSource with code = temp tCode4;
     assign temp tWord4 := Word .
   end -- for WordSource with code = temp tCode4 ...
 end -- if data-entry NoWords = 4 ...
  if data-entry DisableSpaces = yes then
   assign temp tPassword := jointext(temp tWord1 ,
      jointext(temp tWord2,jointext(temp tWord3,temp
       tWord4))) .
```

```
assign temp tPassword
       := jointext(temp
       tWord1 , jointext("
       ",jointext( temp
       tWord2, jointext(" ",
       jointext(tWord3,jointext(" ",tWord4))))).
   end -- if data-entry DisableSpaces = yes ...
   if data-entry DisableNumbers = yes then
     if temp tWord1 + temp tWord2 + temp tWord3 + 1 > 1 then
       assign temp tPassword := blank .
    end -- if tWord1 + tWord2 + tWord3 + 1 > 1 ...
   end -- if data-entry DisableNumbers = yes ...
   if data-entry RandomiseCase = yes then
     define temp "tNoChars" number ...
     define temp "tGoUpper" number .
     assign temp tNoChars := length(tPassword).
     while temp tNoChars > 0 do
      assign temp tGoUpper := floor(random() * 2) .
     if temp tGoUpper = 1 then
        assign temp tPassword := jointext(firstc(temp
          tPassword, tNoChars-1), jointext(upper(midc(temp
           tPassword, tNoChars, 1)), midc(temp
           tPassword, tNoChars + 1, data-entry TotLenPW )) ).
      else
        assign temp tPassword := jointext(firstc(temp
          tPassword, tNoChars-1), jointext(lower(midc(temp
          tPassword, tNoChars, 1)), midc(temp
          tPassword, tNoChars + 1, data-entry TotLenPW )) ) .
      end -- if temp tGoUpper = 1 ...
     assign temp tNoChars := temp tNoChars - 1 .
    end -- while temp tNoChars > 0 ...
  end -- if data-entry RandomiseCase = yes ...
  if length(temp tPassword) <= data-entry TotLenPW and temp
  tPassword not = blank then
    list records
       tPassword .
 assign temp Kount := Kount + 1 .
end -- while temp Kount < data-entry NoExamples ...
```



SUBFORMS IN DOS 5.0

# Flast shall be First

Sorting subform records into date or reverse date order using the extended date format, by **Richard Laidler** 

ataEase 5.0 DOS introduced an extended date format field type to allow the input of the full year, rather than just '95' or whatever. This now overcomes many problems associated with the need to store dates into the 21st century.

In the September 1994 Dialogue, an article I wrote demonstrated a method of displaying sub-records in date or reverse date order and at the same time coping with 21st century dates. This was a workaround for DataEase 4.53 but was limited by the fact that we still only had two digits to store a year number. So effectively, we were limited to a 100-year span of dates. It also needed a decision as to when this 'century' started; in the example in the article, 1980 was used.

The technique for using extended date fields and sorting the sub-records into date or reverse date order is the same in concept for version 5.0 as for

Subform records in date and reverse date order — no more problems with 21st century dates! 4.53. However, we need to make some changes to the field lengths and derivation formulae. The construction for the field to use in the relationship is:

a) For date order use an indexed text field of length of foreign key + 7 with the following formula:

jointext ( ForeignKey ,
jointext ( lastc ( DateField
, 4 ) , lastc ( julian (
DateField ) , 3 )))

b) For reverse date order, we need two

fields as before. RevJulDate is a numeric string of seven characters, derived as:

9999999 - jointext ( lastc ( DateField , 4 ) , lastc ( julian ( DateField ) , 3 ))

And the field to use in the relationship will also be an indexed text field, length of foreign key + 7, using the formula:

jointext ( ForeignKey ,
RevJulDate )

The screen shot here shows this working.

Note that the julian function only returns the year number from an ordinary date field, e.g. from 1995 we get '95'. It also returns only the last two digits of the year from an extended date field. To get round this we extract the entire four-figure year value from DateField using text functions [another elegant solution from DataEase, letting us mix and match text and numbers Ed]. The illustration shows how the field formulae described above actually work. In "DateLink" we have the foreign key (12345678) joined to a modified "julian" value of the Date Appointed (2005135 for P Parrott). In LinkDate, we again have the foreign key joined to the DIFFERENCE BETWEEN the constant 9999999 and the modified "julian" date value which in the P Parrott record works out as 7994864.

 Richard Laidler, who runs the UKbased ALT-F1 Consultancy, specialising in DataEase, is currently planning a new version of his popular "Suggestions, Hints and Tips" book and database for DataEase for Windows.

```
Company
 Sub record 18 on Line 1 of 14
                  PRESENTING SUB-FORM RECORDS IN A SPECIFIED ORDER
                                                     Reg No 12345678 "AlphaSort")===
 Company Name R U KIDDING PLC
                                                                         Link12345678*
        Directors
                    in Name Order
                                    (Relationship
      Company No
12345678
                                                                   Date Appointed 01/01/1993
                    Name
                                      AlphaLink
                    M Monkey
       12345678
                      Mouse
                                                                    01/01/1992
       12345678
                    P PARROTT
                                       12345678P PARROTI
                                                                    15/05/2005
        Directors
                    in Date Appointed Order (Relationship "DateSort")=
      Company No
12345678
                   Name
                                       DateLink
                                                                   Date Appointed
                   S Swordfish
P PARROTT
                                                                    13/10/1993
       12345678
                                                                    15/05/2005
        Directors
                    in Reverse Date
                                      App. Order (Relationship
                                                                    "DateReurs")
     Company No
12345678
12345678
                   Name
                                       LinkDate
                                                                   Date Appointed
15/05/2005
13/10/1993
                    P PARROTT
                      Swordfish
                   M Monkey
       12345678
                                       12345678800
                                                                    01/01/1993
        Press Page Down to see the normal relationship
F4CMDHELP ESCEXIT F2SAUE SH-F1TABLE F3UIEW F7DEL F8MODIFY F9QBE F10MULTI
                                                                                            >>
```



he choice field offered by DataEase has several advantages. The main ones are:

- 1. Data for each field takes very little disk space, with just one byte needed to store the choice number.
- 2. Data entry is very fast and easy.

  One only needs to enter either the choice number, or, if the choices all start with a unique letter, the first letter of the derived text choice.
- 3. Data entry is very reliable because it avoids possible variations introduced by the preferences of, or mistakes by the person entering the data. This is particularly true if several people enter data in to a database. This reliability is often important for the integrity and

This screen shot presents the three choice methods described. At the top, Extra Choice allows the addition of an ad-lib choice to a preset list.

Beneath this, Variable Choice covers an abritary code to which 'real' meaning is added. At the bottom, All in One allows the user to type in an abbreviation (the field returns the full value), or to add ad-hoc details.

#### **DATA-ENTRY**

# Cake and Eat It

Use choice fields without knowing all choices in advance, by Fernando and Scott Maclean

validity of the database and its reports.

On the other hand, choice fields have limitations. Some that come to mind are:

- 1. You must know what choices you'll need when you create your forms. That can be difficult to do in some applications. The users may not be able to identify the possible needs early enough. Also, the developer may not know enough about the business involved to ferret out a full list of likely choices.
- 2. Unless they are given access to, and are familiar with, DataEase application development work, the user is not able to add new choices.
- 3. If the same choices are used in

more than one form, the choices must be in identical sequence. That is, if choices are Brown, Red and Blue in one place, they cannot be Blue, Brown and Red, or any other sequence, either in a related form or in a data-entry form for reports.

This article discusses two distinct approaches, or variation of choice field use which help overcome some of the limitation of the choice field. I will call them the "Extra Choice" and the Variable Choices". In addition, as an added bonus, this articles presents an "All in One" data entry method, with no choices, but with the ability to use abbreviations or acronyms to enter longer, more description data.

Figure 1 shows the main data entry

form. The three methods are incorporated into the main form for this article.

#### **Extra Choice**

We recently developed a database for tool tracking for one of our customers. The customer had well-defined areas where the tools are usually stored., by he needed to add a new, temporary location. We used the "Extra Choice" method to accommodate the customer's need.

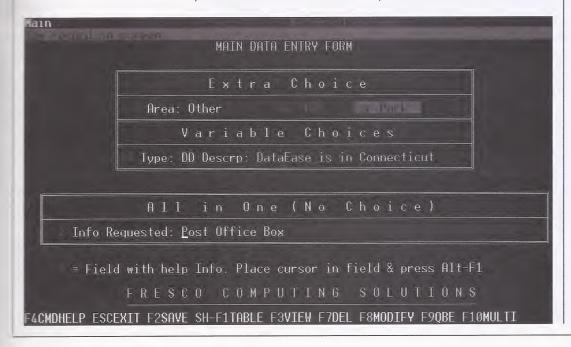
All elements of the Extra Choice method are contained in the Main data entry form: the choice field and two text fields. The three fields are AreaChoice, Area and AreaOther. The three fields let the user enter choices, as usual, and on occasions, new text, not available from the choice field list.

The choice field has the choices required by your application plus one more choice. The extra choice — "Other" — along with the derivation for the two text fields, is the key to this tip.

Both text fields should be as long as the choice field. The Area field derivation is:

if ( AreaChoice not = Other
, AreaChoice , AreaOther )

That is, as long as the choice is not "Other", the Area field will hold the text of the AreaChoice field. If the



· >0



choice is "Other", the Area field will contain the data the user enters in the AreaOther field.

As you see, the Area text field is used to hold the location data, whether specified by the choice in AreaChoice, or by text in AreaOther. For that reason, this field is not virtual and is set to prevent entry. Also for that reason, reports and other forms must refer to this field when location data is needed.

The derivation of AreaOther is:

if ( AreaChoice not = Other
, noexist , AreaOther )

This field is only needed when the user enters "Other" in AreaChoice. As long as the choice is not equal to "Other, AreaChoice will not display, only appearing when the user picks "Other".

This method keeps many of the benefits of the choice field for the majority of the data entry, and provides the user the flexibility of entering extra choices when needed. Since the two text fields must be added (Area and AreaOther) the savings of disk space are lost. That is more than counterbalanced by the more consistent data entry, speed of entry and flexibility gained.

#### **Variable Choices**

Let us give you a little background. Here again, necessity was the mother of invention. A Government Property

Management application we developed for use by government contractor required a field to identify the type of property in question, for instance

"Consumable Material", Special Tooling", Industrial Plant Equipment", etc.

The choices depend on the type of work the contractor does for the government. There are generally limited to a few items which are to be applied to hundreds of property. Because the contractors need to submit reports by type of property, the type of property has top be consistently identified; that is, "Industrial Plant Equipment" had to be called that every time, and cannot be entered as something like "IPE" or any other variation. That is an ideal candidate for a choice field.

The problem is that, over a period of time, the kinds of property the contractor deals with may change or increase. Also, the application we developed had to have flexibility and be adaptable to any contractor, which means the choices and their mix were almost infinite.

To maintain ease of data entry, uniformity of data, and to be able to program some special types of property, we developed the "Variable Choices" method.

In addition to the two fields on the Main form, a very simple "VariChoice"

form is used. The VariChoice form consist of two fields: one choice, the other text. It is related to the main form by their choice fields.

The Type field has double letter choices "AA", "BB", "CC", etc. (26 in our example). It is indexed because it is used to related the VariChoice form to the main form. The 30-characterslong text field Descrp is used to enter the meaning or description the user wishes to assign to a given choice value. To ensure no duplicate descriptions are entered, it is made unique.

The corresponding fields in the Main form are also named Type and Descrp. Both field are essential identical to those in VariChoice. Descrp in the Main form is virtual and has the following derivation formula:

if ( Type = blank , blank ,
if ( lookup VariChoice
Descrp = blank , "Type not
Entered" , lookup VariChoice
Descrp ) )

With this method, the user is able to define the meaning of as many of the defined choice as he needs in the related form and then enter the data in the main form with a single keystroke in the choice field.

B. Scott MacLean builds Unix & DOS/Novell networks and programs in DataEase and other databases for a San Francisco systems house. Fernando A. MacLean (his father) established Fresco Computing Solutions to developed custom DataEase applications, including PropEase, a Government Property Management application. Reach him via Compuserve 76311,25, phone (408) 268-6579 or mail, 6304 Menlo Drive, San Jose, CA 95120-1824.

• This article was previously published in ExpertEase.

#### **ALL IN ONE**

This method has nothing to do with choice fields, but is related to the other methods in this article in its quest for ease and uniformity of data entry. It was developed to enter data describing what information was requested from a copying service. The description of the requests was fairly repetitive and often long. This method is designed to save operator time and to standard-

ize the descriptions in a manner similar to the way we tend to talk in many industries: that is, we use acronyms or abbreviations meaning everyday, long terms used in the business.

The Main form, where the description would be entered, needs only one text field. We'll come back to it in a minute. Like the Variable Choice method, this "All in One"

method requires a simple supporting form, called QuickInfo. The two fields Code and Info are text fields, five and 50 characters long respectively. Code is indexed to link this form to the Main form. It is also unique and required. Info is also required; there should not be codes without definitions!

The field in the Main form, which we called InfoRequested, is also a text field 50 characters long. It

contains the following derivation formula:

if ( length ( Info Requested ) < 6 , if (
lookup QuickInfo Code not = blank , lookup
QuickInfo Info , InfoRequested ) ,
InfoRequested</pre>

The derivation allows very flexible data entry while also permitting lookups of defined codes. That is, if the text entered in the Main form's InfoRequested is less than six characters long, the derivation formula looks for a matching code in the Code field of the supporting form QuickInfo. If the Code field is blank (no match is found), it will leave the data entered as it is. If,

on the other hand, it finds a matching code, it extracts the definition and puts it in the Main form field.

If the operator enters a six characters or longer description, the derivation leaves it alone. Finally, if the operator uses a predefined code to lookup a description, the operator can also append to the derived description. The ability to append or modify the description cannot be accommodated in the normal lookup method.

18



**DATA-ENTRY** 

#### in a form where the quantity Speedup your of records exceeds 5-10 thousand? If so, you will have spent a while in front of the screen reading the message "Press Escape to abort the search". To earches

Iouri Boutchkine and Rodrigo Fritz on a technique to make searches on nonindexed text fields a lot quicker

fields in the form. Let us imagine that the form where we have to perform the search contains an indexed field

add insult to injury when you select the desired record,

DataEase starts searching all over again to enter records into the lookup

ave you ever tried to search

on a non-indexed text field

CustomerID and a non-indexed field CustomerName. Using a dynamic lookup (Ctrl-F10) we want to find a customer in the related form (which contains a significant quantity of records), and fill all the required fields in our form.

It would be much quicker to perform a lookup on an indexed field, but very often a user does not remember by heart such information as CustomerID. Usually a user deals with the customer and remembers the name of the company. A user should be able to enter the customer name with wild cards, and perform a dynamic lookup. That is why it is a common practice in such situations to create the relationships between these forms based on CustomerName rather than CustomerID field.

Another reason for using the relationship based on the name is the problem of searching the required field in a form with a large quantity of records. When performing a dynamic lookup DataEase treats the related

form as a subform in terms of the quantity of records. If a user presses Ctrl-F10 without entering any search criteria into the field, he will see the whole table of records. Pressing the End key or continuously paging down, they will receive the message that the limit of 5000 records has been exceeded, the process will be aborted and/or the com-

That is why entering some search criteria in CustomerName field is critical, to narrow down the selection.

puter may

freeze up.

To return information to CustomerID we must have a lookup in its derivation formula: "lookup RelatedForm CustomerID. Thus typically we may have the following struc-

ture: two forms related by CustomerName and a lookup in the derivation formula of CustomerID.

#### **Faster Solution**

This will work, but quite slowly. The slowness is caused by searching the non-indexed text field in the form with many records. When the record with the customer name is found, DataEase starts the second search to enter the information in the "Customer ID" field.

fields - CustomerID and CustomerName — and eliminate the lookup in the derivation formula of this field.

But we cannot leave the derivation formula blank, or no matching records will be found. To solve this problem we must enter an asterisk (\*) in the derivation formula of the "Customer ID" field. The wild card will represent any matching record. That will not eliminate the slow speed of the first part of the search, but will do away with the second part.

This approach will at least halve the search time and significantly speed up the whole process, because this field now is a part of the relationship and DataEase fills in all related fields automatically.

The second search is performed at the same slow rate, because the same nonindexed field is used as a search crite-

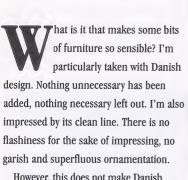
Here is a way to increase the search speed. Change the relationship based on Customer ID to one based on two

• Iouri Boutchkine and Rodrigo Fritz are from Navigators Management Corporation in New York (and not California as erroneously stated in our May issue).



# The Elegant Solution

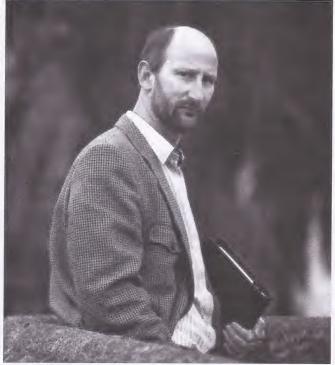
Malcolm Bolton is in the mood for some good design



However, this does not make Danish design as boring as post war British utility furniture. On the contrary, these elegant solutions are generally fun to use and exciting to design. Like all enduring ideas, good design appears so simple and so obvious that you wonder why no one ever thought of it before. Sometimes I wonder if I could have thought of it. But when I try to come up with a better solution only to find that it is not so easy after all.

'The Elegant Solution' is the title of the Fourth DataEase User Group Conference (Oct 30-31, London). But what is an elegant solution? I've outlined a few features of it above. The elegant solution is simply finding an obvious answer that is more direct and no-nonsense than the ideas you first thought of. It is not easy to design something that will be economically built, do what it is supposed to, and be robust and maintainable.

In the same way, getting elegant solutions at the



same time as achieving the design objectives for computer systems is not easy. I have seen many fail

"The elegant solution is simply finding an obvious answer that is more direct and no-nonsense than the ideas you first thought of."

because they were over-complicated with so many bells and whistles that the user is subsumed by the sheer number of choices and complex operations they must conform

DataEase 4.53 I think has a great number of the features that make it an elegant solution. It is robust, no-nonsense and gets straight to the point. There are very few areas where, given the problem it was addressing, a better design response could have been put together. The version 5 series has a little way to go for DataEase to reclaim its position as a

producer of robust products that are easy to use and that give the optimum solution to various tricky problems.

Hunting out elegant solutions is the goal of our Fourth Conference. Through the various tracks and seminars we strive to help you master the software so that you will have all the skills you need to find the best design for your projects. I hope to see you there. I am sure that a great many of you have elegant solutions of your own. It will be interesting for us all to share your secrets.

 Malcolm Bolton is Chairman of the DataEase User Group, whose London conference is on from Mon 30th-Tues 31st October.



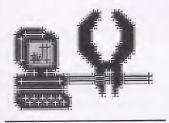


TIPS, TRICKS, TRAPS AND MUCH MORE ...

# Feedback

Dialogue is the magazine for DataEase users, written by DataEase users. And we love to receive letters! If you are proud of a solution you have come up with, or have a problem you would like overcome, share it with the international DataEase community by writing to us. We even welcome criticism. Get in contact by posting your letter to: Adrian Jones, Dialogue Magazine, Anchor House, Anchor Quay, Norwich NR3 3XP, UK. You can fax us on +44 (0)1603 762807. And if you prefer not to worry about pieces of paper, stamps and envelopes, get in touch super-quick at our CompuServe address — 100143,1025, or via the internet, where our address reads

100143.1025@compuserve.com



#### **F-ing Networks**

It's amazing how serendipity raises its head. I was just going to write up something for inclusion in Rey Caunca's "Trouble Shooting DataEase" database, but was waiting for client permission to do so, when along comes Stephen O'Neill's letter in the summer issue of Dialogue.

My client was running into the very same situation — one DataEase application (and one only) kept spontaneously combusting. One person would be able to log on, and then later on in the day, without fail, another would try, and find that she couldn't. The user file had gone up in smoke. Or, DQLs and forms would fail,

because the relationships table had been fried. Once the RDRR file was reduced to ashes. Anyway, the problem would be fixed, only to re-occur within minutes or days...

After several attempts at trying to fix the problem, we discovered that a different application, with the same database letter, was in the DataEase program directory (F:\apps\dease) AND that F:\apps\dease was a search directory (equivalent to the path, for those not using Novell). We deleted the database, and everything has been running smoothly since then.

Stephen asks "Could it be that DataEase was somehow using the search mapping to locate its user file...?" Well, based on both of our experiences, I'd say the answer is an unequivocal "yes", and furthermore, that DataEase will use the search mapping (or path statement) before looking in the "current" or "application" directory. My client always started their applications from the data directory (changed to the application directory

and then typed "de16m").

How did the files get into
F:\apps\dease (or F:\public)? User
error. (Too bad neither of us ran the
Novell utilities to see who the owner
was before deleting the files.)

As a result, I'd make the following general recommendations:

- 1) Make sure that applications (databases) are not mixed in with the DataEase program in the same directory.
- 2) You can put the DataEase program files in your path or search drive map, but NEVER make an application directory a search directory or part of your path statement.

Lawrence Fox at ComputerWizard Consulting,

Thornbill, ON, Canada

#### **Colourless Style**

It was only a few years ago, but it seems like decades now. I remember PC PLUS magazine devot-

ing nearly a whole issue to the latest breakthrough in PC technology - the Amstrad 1640 with its 640k memory and — best of all — an EGA colour monitor! Much praise was lavished on this device which improved display quality beyond anything previously seen. What has happened since — vast resources have been devoted to producing colour monitors whose quality outstrips that of even the best domestic TV set by several orders of magnitude. We now routinely see display resolutions of fantastic definition, 64k graphic accelerators, monitors capable of displaying in excess of 16 million different colours, and various works advising us on good screen design,







where colour is used barely, if at all!

I refer of course to Adrian Jones' article in the last issue "Any Colour You Like" in which he discusses in detail a screen style which makes DfW applications look very like any other Windows screen. I find myself very

largely agreeing with our Adrian here. When I first started playing with DfW (not having used Express at all), I used all the colours in the rainbow quite freely (because it's good fun to experiment) and I too am guilty of producing screens that remind us of

gruesome kipper ties as per 1970's fashion! After reading the article, I set about re-doing a DfW screen along those lines, and, yes, although it's almost completely monochrome, it does look better. The point is, I suppose, that if this is a serious applica-

# Over the Edge

I need to document an application. If I press Sh-F9 to print the definition of a form, no matter what instructions I send to my printer, everything seems to come out in large Courier. This is useless when it prints a form definition because long field formulae scroll off the edge of the page. I can make a screen dump in the font I want, but that doesn't help me will full form definitions.

There's nothing in the manuals indicating the user can influence things here, yet I would have thought decently printed procedure and form definitions were common needs?

John Green

East Midlands Electricity

Leicestershire

You can get shareware programs that will re-direct the output from the printer to a disk file, which means that you can load them in a word processor and sort them out later.

But to be honest, it's not just the printer controls over which these printouts are left wanting. For a start, you have to load each procedure and form one at a time, hit Sh-F9, exit and load the next one in the list. This is very tedious, and it's easy to miss one out. The procedure and form printouts contain different basic information — form printouts have the date and time of the printout at the top of the listing; procedures do not. You can't select what aspects you want to print, and so on.

So it's time for a blatant product plug — DE Doct'r. This is a vastly underrated add-in product that makes creating the technical documents for a form both easy and flexible. For a start, you can say, in less than a minute, that you would like to print out all forms and procedures, and you don't have to load each one.

The printouts are consistent. You can send them to a number of ports, and also to a disk file. I used it to help me get started on looking through the LedgerMaster vertical application, which consists of over 90 forms and 200+ procedures. To try and get through all that and vaguely produce Dialogue before Christmas would have been impossible. But since I was looking at the application from the point of view of a user, all I needed was to get DE Doct'r to list all data-entry fields, together with their help messages. Thus, in next to no

time I had a help document to help me understand the application.

The output looks pretty much like the DataEase output, but what you can list is very flexible. There's a small choice of fonts. But the problem you were having was to do with the text going off the edge of the page; DE Doct'r sorts out the wrapping for you.

It sells for \$249 in the US, and for £179 in the UK. At the time of writing, the DataEase User Group has it on special offer at £149. I did a review of it back in the March issue of Dialogue (page 25).

In fact, for what it's worth, my regularly used add-in products for helping me get as fast as possible to understanding what is going on in often complicated applications are Application Charter (get my head round the structure of the database), DE Doct'r and JADA Tools (one recent use — globally changing the output of a set of procedures from the printer to the screen).

Mind you, the odd press release or help text file doesn't go amiss...

```
Print Documentation
Suppress Screen only DOS File only Screen & DOS File LIST

Include Forms? yes 29 of 29 (F10)
Fields to Include Data Entry Fields Only
Include Procedures? no 0 of 36 (F10)
Include System Forms? no
DOL Comment-filter On? no
Dutput Destination LP11

Output Type LaserJet PCL
Simplex/Duplex Simplex

Include Table of Contents? yes
Send Printer Commands? no (F3)
Starting Page Number 1 1
Number of Gopies 1

Start DeLimiter <! End DeLimiter ty
Database Marnings. Screen & DOS File

ESOFyil DJL HMod F2Syng F3D-year Contents Children Children Lines of Dose Lines of Lines of Dose Lines of Dose Lines of Dose Lines of Lines of Dose Lines of Lines of Lines of Dose Lines of Li
```

From this straightforward print screen, you can tell DE Doct'r to produce definitions of all your forms and procedures in one go. Or — as here — you can be selective (I have chosen to list just forms, and just those fields that allow data-entry). For added refinement, you can build templates that detail say derivations or security levels or whatever you want from the field definition screen. There's even a table of contents.





tion, somebody might have to look at it all day long so it doesn't want to look startling.

But, I thought, colour can be put to good use - particularly to emphasise things --- so couldn't we use it discreetly? After a bit of experimenting, I found that it is possible to bring colour into your screens without making them unnecessarily brash, and where I now like to use it is to bring some discreet emphasis to action buttons. I have four different styles of button -Save/Update, Help, Exit and Delete. Apart from delete, they all largely follow Adrian's style sheet: black text, silver fill, grey shade and white shine. Where they differ is that each uses a different colour border. Save/Update is green, Help is yellow, Exit is red. Using the second thinnest line thickness makes these buttons stand out just enough without being garish. The Delete button has the text in red as well - red for danger!

Here's a couple of tips on style sheets. By default, any style sheet you create will be saved in the application directory. Copying the style sheet to the directory \DFW\STYLES will make it available to any application. When looking for a style sheet, DfW searches the application directory, the \STYLES directory, and finally any specified search path you may have set in Application Preferences. How to find the style sheet file name? Click on File-Save Style Sheet and watch the prompt line at the bottom of the screen. This will give the file name used. Copy it using normal DOS commands or the File Manager. Remember though, if you want to distribute an application, you will also need to copy the style sheet files to the distribution disk, otherwise the recipient will not be able to use that style sheet. Incidentally, the same is true of

fonts and graphics — so it may be best to stick to the "standard" fonts that anyone with Windows is likely to have.

The second tip concerns printing. Here's where colour can really help because unlike the screen, most printers print in one colour — black. If you print a document in WYSIWYG, you need to make the background (form, sub-form and record objects) white — unless you have an unlimited budget for toner or ink cartridges! Using the pale colours for things like group total fields results in subtly different shades of grey being printed and can add a professional finish to a printed document.

Richard Laidler,

ALT-F1 Consultancy, Sudbury,

England

#### **Slow Return**

We have a database which has an employee form with a relationship to another form, the second containing contacts of those employees. Contacts in turn has a relationship with a Customer form.

In Contacts, there is a Remarks subform, with a corresponding relationship between Contacts and Remarks.

If I look up a contact which is related to a customer, and that specific customer has a lot (let's say a few hundred) contacts with other employees, it takes ages (minutes) before the Remarks subform is displayed in Contacts.

All fields on which the relationships are based are indexed.

Is there any way to speed this up?

Marco Hoeve Larenstein International College Netherlands

At its best, DataEase can display subform records in minimal time, even when hundreds of thousands of records are involved. The key factor is the relationship between the "header" form and the subform. This should be based on a single matching field and must be indexed on the subform side. It is this index which is then used to find the matching records for the subform display.

If the relationship between the two forms is based on more than one matching field, DataEase only used the first index (even if the others are indexed) and is significantly slower. If this is your problem, you should create a hidden field on each form which concatenates (joins together, using the jointext function) the

# Show Last First

I'm using DataEase for Windows. I've just started using the input using command, and I'm quite impressed. However, whenever I process a record (F2 or F8), the screen goes blank. Is there any way of keeping the last record processed on screen, or am I stuffed? Paul Mason.

Nottingham, England

No, you are not stuffed, although there is an annoying quirk in the current version of DfW that doesn't make the answer as elegant as you might like.

Go into the form you are using in designer view and choose Properties from the Document menu. Here you can define what the initial action for this form is — in your case you want the initial action as display the last record. Then, when you use this form for your input using, the last entered record will be displayed.

This does mean that when someone first runs the procedure, the

last entered record from a previous session is displayed, so they may need to press F5 to clear the form.

Now, you may want to use the form in other ways in your application when you do not want it to display the last entered record.

What would be good here is to define a second form using the same table, and make this form's initial action as "Last Record".

Then you could use this form in your input using statement, rather than the form that defines the view.

Unfortunately, you cannot use this new form in your input using statement — DataEase insists that you use a form that owns the table.

To get round this, I suggest you make the defining form's initial action to be display last record, and for other occasions when you don't want this to happen, create other forms using the same table but with different initial actions. This does mean, though, that you can't have another input using onto the same form with a different initial action.



# Cheque Out

Larger companies often issue cheques on which the amounts etc. have been generated from within a computer system. As well as the normal amount in words, such cheques often include a series of boxes in which words corresponding to the figures and their position within the amount appear. I was recently asked how to do this from within DataEase — here's how I did it.

The approach I used was to define a form (which could equally well have been a data-entry form) on which derived fields would produce the necessary figures and text; leading to a query which in essence need be nothing more than:

```
List records
data-entry [field1];
data-entry [field2]; etc.
```

In the examples that follows, it has been assumed that the maximum value of any one cheque will not exceed £999,999.99.

First, take a look at the examples in Figures 1 & 2. The Amount In Words field uses the spellcurrency function. The Whole Pounds in Words fields use a series of 'if' tests in their derivation to return a word, or "\*\*\*\*\* depending on the value in the Amount field. The trick here is that the amount itself is placed

in a numeric string field, which I've called AStr, using the derivation:

floor ( Amount )

The floor function removes the pence/cents part of the figure, while putting it into a numeric string automatically adds leading spaces. Thus we can locate the character in the numeric string that represents, say the ten thousand figure. If it is a zero (because of the trailing spaces), we just put in a string of asterisks, otherwise we spell out that figure.

To show how this achieved, a summary of the relevant fields and their derivations is shown in Table 1.

The midc function is used in preference to the firstc for the HunThou field because we can then copy that field, paste it five times, and quickly change the name of each pasted field, as well as make a very few easy adjustments to the field derivations. Note that we are intentionally deriving five stars (\*\*\*\*\*) in all positions to the left of the amount — this is not indicating an overflow on a calculated field.

This gets you the necessary data values for printing your cheque. Positioning the fields in the format will take some care depending on the actual size and layout of your blank cheques. It may be necessary to use an Output command rather than a conventional format, and include printer control codes to get pre-

cise print head alignment. There was an excellent article by Adrian Jones entitled "Precision Printing" in the November 1994 Dialogue which gives some useful ideas on this tricky subject.

Richard Laidler Alt-F1 Consultancy

• To accommodate the longest possible spelt currency under £1 million, this field must be 84 characters long (that figure being £377,377.99 or similar variations). If you have eagles or other emblems than the queen's head in your pocket, remember that 'dollars' needs yet another character. I expect an e-mail by return from readers in Holland and Germany who, I'm sure, will point out that they'll need an entire memo field to get their currency in. Italy, well ...

Are you in the mood for some trivia? Well, the longest currency number you can have in DataEase is £377,377,377,377.99, or "Three Hundred Seventy Seven Billion Three Hundred Seventy Seven Million Three Hundred Seventy Seven Thousand Three Hundred Seventy Seven Pounds and 99 Pence", which is 156 characters long, and which, by pure coincidence, is also the ASCII value for the pound sign. Someone else can tell me what the biggest cheque ever raised was, and what the entire world debt is.

WORDS SP	LIT OUT SEPA	DE ISSUE WIT RATELY. MAXI	H RMOUNT IN	WORDS DERIVED £999,999.99	AND WHOLI	POUNDS
		Date 22	March 1995			
ee ALT-P	1 CONSULTANC	¥			£ 123	-45
		e Pounds and	45 Pence			
ndred ousands	Ten Thousands	Thousands	Hundreds	Tens Two	Units Three	

Figure 1 above: Cheque less than £1000 Figure 2 below: Cheque over £99,999.99

HORDS SP	TRATING CHEQ LIT OUT SEPA	UE ISSUE WIT RATELY. MAXI	H AMOUNT IN MUM VALUE =	WORDS DERIU £999,999.99	ED AND WHOL	E POUND
		Date 22 I	March 1995			
yee ALT-F	1 CONSULTANC	Y			£123,45	6.78
ount in W		Thomas C	ur Hundred	Pifty Civ D	ounds and 9	
	Twenty Thre ds in Words:	i mudsana Pe	, manarou	THEY SIX I	ounus anu r	8 Pence

**Table 1: CHEQUE FIELD DERIVATIONS** 

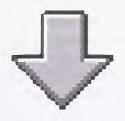
lable I.		I. CHEQUE FIELD DERIVATIONS
	FIELD	FORMULA
	AmountWords (Text 78)*	spellcurrency ( ChqAmount )
	AStr (Num Str, 6)	floor ( ChqAmount )
	HunThou (Text 5)	if ( ChqAmount >= 100000 , spellnumber ( midc ( AStr , 1 , 1 ) ) , "*****" )
	TenThou (Text 5)	if ( ChqAmount >= 10000 , spellnumber ( midc ( AStr , 2 , 1 ) ) , "*****" )
	Thou (Text 5)	if ( ChqAmount >= 1000 , spellnumber ( midc ( AStr , 3 , 1 ) ) , "*****" )
	Hund (Text 5)	if ( ChqAmount >= 100 , spellnumber ( midc ( AStr , 4 , 1 ) ) , "*****" )
	Tens (Text 5)	if ( ChqAmount >= 10 , spellnumber ( midc ( AStr , 5 , 1 ) ) , "*****" )
	Units (Text 5)	if ( ChqAmount >= 1 , spellnumber ( midc ( AStr , 6 , 1 ) ) , "*****" )

24



values of all fields in the relationship, and make this the only matching field.

You should also check that the delay is not caused by any derived field on the main Contacts form (such as one counting the number of remarks), rather than the subform. This is most easily checked by deleting the subform from the main form and comparing access times.



#### Get In Order

We use our database to store contract details. Until recently contract numbers issued have been in the 900 region (981, 982, etc.). On some occasions a contract is split (981 becoming 981-A and 981-B). In order to allow for this, the contract number field is a text field, thus allowing the extra two text digits at the end.

Recently we reached contract number 1,000, and, when running reports, this appears before any contract beginning with 900, and therefore out of sequence, thus:

Is there any way when running a report to ensure that 1000 appears after 900?



Darren Clark
Panfoods, London

Because your code is a text field, the records are being listed in alphabetical, not numerical order.

When listing the records, you need to extract the number part of the text field and turn it back into a number.

This is very easy, as long as the number always appears first in the text field, and there are no other numbers used later. Just add a line to your DQL:

abs ( ContractCode ) in

Your records will now be sorted in numeric order, with 999 coming before 1000.

You don't have to use this line in your format, though, and can simply replace it with the proper contract code.

If a letter comes before the number, that letter is ignored (which one exception, of which more later), and the number part of the code is dealt with instead.

If you add numbers after the letters, say 999-Q3, the abs function will create the number as 9993, and therefore this record will list out of sequence. You need to ensure that the rules about data-entry are clear to all who enter records, and maybe should run occasional data validation reports to



make sure that there are no strange codes. Still, you can get round this as well.

First we must isolate the real number part of the field. I'm assuming that you will always use a hyphen after the number and before the letter. The function to use is textpos, which tells you the position of a specified character or set of characters in a line of text. Thus:

## Next In Sequence

While browsing through some old copies of Dialogue, I spotted a letter in the December issue which tackled the problem of sequencing and sorting.

I have a database in which I use a particular method to assign a sequenced number to records. While it may be inelegant, it could offer another workaround to the problem as described by Phil Wainwright. It also might be attractive to users who haven't ventured into the world of CDFs and who therefore have a sneaky suspicion of them (like myself, I must admit!).

My database, which resides on a Novell network, contains a Commands form to which various users may enter records at any time (day or night). This form needs a sequenced reference number, unique to each record. Output from this form is sent to a Sun Workstation attached to a UNIX machine running TCP/IP. This remote system particularly requires the unique reference numbers. Users may only enter or update records in the Command form via procedures so this helped me find a solution to my needs.

I created a LastNum form which has one record only and which holds a reference number field (among other things). When running a procedure which inserts records into the Commands form, the LastUsed Reference Number is read from LastNum, assigned to the Command form record being written, incremented by one for each command and finally written back to LastNum ready for the next time it's needed. In order to prevent entering records with duplicate reference numbers, the LastNum form is locked at the start of the procedure and unlocked as soon as the procedure no longer needs its exclusive use. No problem.

My output to the Unix machine needs to be sorted by command type. The reference numbers need to be unique but not necessarily appearing in sequence. So in this instance, the sorting requirements are external to DataEase. If they weren't, the contents of the Commands form could be sorted and processed as required without affecting the selection of the next reference number to be used.

It just goes to show that there are many ways of achieving the same result, some better than others. Selection of one method over another may depend on speed requirements, PC memory, disk space limitations or even the programming skills of the user.

Dave Kerr

Telecom Eireann, Dublin, Eire



textpos ( ContractCode , "-" )

Next we need to grab all the letters (since your numbers are regarded by DataEase as letters in your text field) before the hyphen, and we'll use the function firsts. The syntax for this function is:

firstc ( StringOfText ,
NumberOfCharacters )

Since our numbers appear to the left of the hyphen, we want to get the position of that hyphen, and grab the first characters in the string up to one less than that position:

firstc ( ContractCode ,
textpos ( ContractCode , "-"
) - 1 )

Finally, we need to trick DataEase into thinking that this is a number, rather than a string of text. To do this we just add 0 to the derivation:

0 + firstc ( ContractCode ,
textpos ( ContractCode , "-"
) - 1 )

If there is no hyphen in the code, the textpos function will return zero, and hence the value of the firstc length will be minus

1. Curiously enough, this will return the entire string, presumably because finding a minus position is meaningless.

This will return the number as an integer, which means that a comma is added, as in 1,234. If you move the '+0' bit to the end of the derivation, the field (by default) is created as a floating point number, without the separating commas.

#### E's Aren't Good

More fun, though, is when your chosen letter is 'E'. DataEase will regard this as a mathematical function (exponential) and create some interesting effects. With 'E123', it will return 0.'123E' returns, thankfully, '123'. However, '123E3' becomes '123000' and '123E99 creates a number too big to show.

Perhaps it would be best if this is at all likely to prevent the user entering an 'E' (i.e. allow codes 123A, 123B, 123C, 123D and 123F, but not 123E). To do this, add the following to the Upper Limit:

if ( textpos ( ContractCode
, "E" ) > 0 , blank ,
ContractCode )

Which means: if there is a letter 'E' (upper or lower case — they're both found) in this field, the maximum value allowed is blank, which means they can't enter anything in here. If there isn't an 'E', then the maximum value is what the field value actually is.

You can also add the abs derivation to a field in the contracts form. This is especially useful as it allows you to index this field rather than the code entered, and thus running your DQL will be a lot quicker.

Ultimately, it would be better to separate the number and letter part of the code into two fields, the first a numeric string and the second a text field. Then you can list both these fields in order.

(Even better would be to have a subform for the 'A', 'B' etc. parts of the contract, but that's another story...)

# Crazy Course

I was very interested in your short article in the latest Dialogue entitled "Migration Help — No Thanks". It seems that you are not the only ones having such problems. I was recently contacted by the training division of DataEase, asking if I was interested in attending one of their migration courses.

My own reaction was that at present I wasn't really considering migrating any of my DOS applications into DfW. I felt there was still so much work to do after migration that it was probably easier to start from scratch, reviewing the basic design of the applications at the same time.

However, they made me a good offer, and with lunch included), I went along and much enjoyed the day. As well as issues of physically migrating DOS applications to DfW, they covered the user/designer/developer migrating his/her skills and attitudes. They demonstrated the differences between the two environments, showing how (in the opinion of the instructor) the DfW way of doing things has many advantages over the DOS way.

It really turned out to be an introduction to DfW with some handy hints and tips and so on. I don't know if I



would go so far as to say that it left me itching to use DfW for myself ( and I haven't done so since), but it did open my mind to the possibilities of DfW.

I think what you said about users wanting the product to stabilise before committing themselves wholeheartedly to it is very true. I am still firmly in 4.53, although I have both of the 5.0 products installed on my machine. I think DEI are going to have to address a number of serious issues before the DataEase community at large welcomes the new products with open arms.

I certainly don't think that DfW comes anywhere near (for example) Access in terms of functionality or ease of use — either for the end user or for the developer. It worries me that a number of features are only produced for via CDFs, rather than being built into the core product. This seems to be an admission that some things have been left out.

Even designing form and report layouts in DfW can be a very frustrating business. DEI do not seem yet to have matured it into the intuitive level of products such as Word for Windows and Excel. For my part, there are going to have to be a lot of improvements before I will use it happily.

All in all, these kinds of things may be part of the reason why — although interested in migration issues in principle — DataEase users are not jumping overboard to invest time and money to gain knowledge they are not going to use for the foreseeable future.

Phil Wainwright
Pilgrim Homes, London

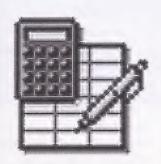
26



ACCOUNTING

# Called to Account

A new accounting package and an additional to an existing one appear on the market, one US, one UK. By Adrian Jones



never thought I'd have the chance to compare accounting packages to buses, but here I have two coming along at once. One — LedgerMaster — is a DataEase application. The second — Systematics Accord — is not, but has links to DataEase.

The accounts department has an historical role, to write up the events of the company's foot soldiers and try and make sense of what has been going on. But changes across the board in business practices — down/right/up-sizing, EDI, Quality Assurance and other MBA-type topics — often mean that the troops are also involved in recording their successes — and even their failures.

Throw in a healthy splattering of legislation and accountancy practice, and most sensible DataEase developers are hunting down bespoke applications, rather than trying to develop their own.

This is more of an introduction than a review of the products. Both Systematics and LedgerMaster are powerful weapons whose true ability will be proved only on the battlefield.

#### Systematics Sales Order Processing

Sapphire Systematics is the company; Systematics accord is an accounting suite which includes sales, payroll, stock control and nominal ledger. The latest addition to the range is a Sales Order Processing module.

Systematics is not a DataEase application. However, the product is connected in a number of ways. First, the company is an off-shoot of the old Sapphire that distributed DataEase in the UK. Second, a unit called Link allows seamless transfer of information to and from DataEase. Thus, with a bit of playing around, you can plug Systematics accord into an existing DataEase application. Third, they sell well into the DataEase market, which means that they understand our needs a lot better than other companies who don't.

On a sunny July morning,
Systematics Managing Director Ian
Caswell explained to me about their
latest addition. "Writing a generic Sales
Order Processing module was not easy.
It's a complicated process, with probably as many ways to do it as there are
businesses. We rejected the first version that we came up with, because we
felt it lost the ease of use that we
believe is essential in Systematics. The

authors had to go back to the drawing board."

There are at least two ways that the order could come in. A brilliant marketing and advertising section generates sales at the drop of a hat, backed up by a team of telephone answerers who process the order. Or a hot sales team works through the prospect list, selling the product at the same time as getting the customer details.

Either way, passive or active, you need a system that makes getting the details as simple as possible. Thus if a customer is not on file, you must be able to enter their address details from the order screen. If they're stretching

credit limit, the sales person should have that information to hand to politely pop the question of 'how about a cheque, please?'.

Systematics is geared up to minimise the key strokes. It uses predefined documents and templates to make entering orders as quick as possible. For example, you're a drinks merchant, and Curly's Mexican restaurant has a regular weekly order for ten crates of Sol beer. You can set this up once. You chose the customer, and then the document type, such as "Order". Then you can specify how many times and how regularly this order is to be repeated, starting and ending on a certain date. Then, when you run the batch invoicing routines, Curly's restaurant will get that invoice when it is due.

In fact, most of the training manual is given over to creating these documents and templates. This is a DOS product; you can't see as you create them how they will look in the end, and instead have to specify the line and starting position in of, say, your

#### **SPEEDY ENTRY**

**AUTO** III 06-0	B-95 Normal TEM00001 Jinna Normal
INTID Interior ideas Limited 87 The Business Trading Estate Biggin Hill Kent Tel: 0959-555444	INTID Interior ideas Limited 87 The Business Trading Estate Biggin Hill Kent Tel: 0959-555444
S.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
96/95 30	21797.50

By specifying a source template document (in this case, TEM00001), I can recall a preset order for this customer, including the details of what they have ordered in the past. At the same time, the screen displays an aged debt analysis for this customer — perhaps we ought to get a cheque before taking the order any further!



address or VAT number. But they only need to be set up once, and then can be recalled when needed.

Cursor movement will skip (by default) details that probably don't need amending. If you do need to change them, just move the cursor back to that section. So, in a sense, whilst there might be, say many details on a screen, Systematics will only move to those that you need to worry about, unless you want different.

Despite the connection between Systematics Accord and DataEase, the interface differs. There are different function keys; even the cursor keys are not quite the same (better in some areas). Adding, modifying and deleting records are done from different screens.

But it doesn't take long to get up to speed. Just about every field has a good help description attached. You can decide whether you want a separate delivery note, or to use the invoice for that purpose as well, cutting down on the amount of documents you have to deal with.

Systematics Accord's Sales Order Processing module is aimed at companies who must have a efficient sales operation, from quote through invoice to credit control.

• To run the unit properly you also need three other modules — Sales Ledger, Stock Control and Nominal Ledger. Systematics is geared at the UK market, although it is possible to amend such things as tax codes to suit other countries. For more details, call: +44 (0)181 553 3720. Each module costs £425 for fourusers.

#### LedgerMaster

LedgerMaster, on the other hand, is a DataEase application, and a pretty

comprehensive one at that. It has taken about a year to develop; as an exercise in putting together a solid application, I'm impressed.

Les Cardwell, who co-developed this with Fred Kingston (Les is in Portland, OR, in NW USA, while Fred is usually in St Lucie, FL, in the South East) says: "our experience has given me a new respect for DataEase as an enterprise development platform." They are selling the product so that it can be tailored to meet a company's individual needs, or as a shrink-wrapped item.

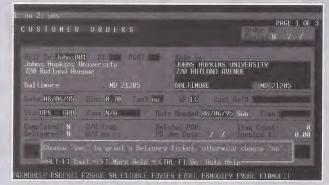
This is primarily a US system, although, no doubt, it could be modified to allow for more European-style address details and taxing. It is a full accounting package, covering order entry, accounts receivable and payable, inventory/stock, cost accounting and general ledgers.

One hidden feature is that just about every report that is run is logged as to when and by whom. There is also a constant monitoring of who has been using the system generally, and for how long.

Another (too rare, in my opinion) bonus is that the developers have taken the time to add usable help messages to fields and forms. This has an extra advantage, because I think it is perfectly acceptable to have a field labelled "DT", as long as ALT-F1 can tell you what "DT" means and how you should answer it. This leads to less cluttered screens.

Transactions can be automatically posted to the General Ledger. However,

#### **HELPFUL & UNCLUTTERED**



LedgerMaster keeps its screens less cluttered by using abbreviations for field labels. But if I can't remember what 'DT' stands for, there is a comprehensive collection of field help messages to remind me. Good use of CTRL-F10 lookups speeds the time it takes to complete the details.

should the accountant decide this is too risky, they can simply disable this to avoid endless untangling of user errors.

Les points out that "the Inventory Control module is much more sophisticated than first perceived. The entire IC module is integrated with the Cost Accounting module, from Bill of Materials, to Work Orders, to costing the item produced. This version is already more powerful than most and not many will be able to exploit it fully as is."

Indeed, the entire system is so vast that I can only skim the surface of what it can do. If we look at Order Entry, we find automatic assignment of the delivery date based on assigned parameters in the related forms. You can generate automatic back-orders and audit history. Goods can be delivered to different addresses to the invoice. Documents produced include pick tickets for the warehouse, delivery tickets for the courier company, work orders for items with low stock levels, invoices, and delivery schedules for each day.

Les says their aim is to reach that business segment which can't afford the alternative, yet let them develop something every bit as powerful (by eventually migrating to SQL if necessary). "It's a very big market; mostly companies pushing \$1m in sales to about \$10m in sales or more. They need all the same functions as much larger companies, but most software companies can't afford to develop and sell a vertical market solution such as this for anything less than around \$15,000. None of them offer the ability at RAD customization that DE does ... at any price."

 For more details on LedgerMaster, contact Les on (503) 629-5792 or Fred on (407) 871-2884.
 LedgerMaster will sell as a complete package for around \$3,000.

#### And for the Small Office ...

Yet another UK package, Office-Pro is also written in DataEase, and aimed at automating many office functions — including accounting — for the very small business. Options cover accounting, address and appointments books, assets register, catalogue, diary notes, fleet management, monitoring marketing efforts, cash management, personnel, prospects, and even a to-do list.

For more details contact: OffPro Systems on 0181-900 1555.



# Chart Art

harters are very popular in Britain. In 1215 King John signed Magna Carter, the Great Charter, which assured the then nobles the rights later won for all. Much more recently (1990, actually) the latter-day barons overthrew our most recent mad despot, and replaced her with another John, who introduced Charters left, right and centre (well, right and centre).

However, as I tell my children about my office at the top of the house, that is another storey. This story is about a software package that tells you what the inside of your DataEase application looks like: a 1001 things you ought to know, but didn't know how to ask.

Application Charter (known to its friends as AppChart) tells you masses of very useful stuff, allowing you to stand back from the detail and take a grand view of the whole landscape, or to burrow into the application to ferret out aspects that could cause problems, or already are. It is produced by Malcolm Bolton and Fraser Williams. Malcolm is of course well known in the DataEase community as the Chairman of the UK User Group.

Did you realise that indexing a virtual field would make any procedure modifying its form run very slowly? It's obvious when it's pointed out, but could you find that field quickly when someone says "Oi, John, why's this DQL so slow then?"? AppChart points such things out to you.

Now those of us who are experi-

**Product: APPLICATION CHARTER** 

Main Purpose: EXPLORING DATAEASE APPLICATIONS

Reviewed: RICHARD SEABROOK

enced DataEase developers know not to use DataEase's reserved words, don't we? (Ahem ...) Of course, there is a slight problem in knowing what those words are, but if you work on the assumption that they are all the terms listed in the DOL Lexicon you won't be too far out [there is also a list recently posted in the DataEase forum on CompuServe — Ed]. AppChart looks through your application and warns you if you are using reserved words, the consequences of which can be serious. (In fact, there is good reason to believe that the mis-use of reserved words is behind a lot of the General Protection Faults in DataEase for Windows, but like my office, that's another story.)

Suppose you find you have been using a reserved word, and you want to change the name of the field throughout the application. Finding everywhere that field has been used, in every DQL, relationship and lookup could be a nightmare, and very error prone, unless you use ... you guessed it, AppChart to show you every use.

You might want to make a similar change, not because of an error, but because, for example, someone has decided to prefix the customer account

number with a single alpha character. AppChart will tell you everywhere the CustomerAccount field is used, so you can make the change systematically, and, more to the point, have your changes checked by the machine.

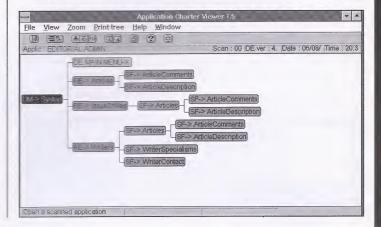
#### **Woods and Trees**

Once an application gets above a certain size, it is very easy to lose track of the overall picture. You can get whole paths through the application cut off as backwaters because no menu leads to them any more. Have you ever found, after spending most a morning modifying half-a-dozen complicated procedures, that not only does nobody ever use them any more, nobody can, because their controlling menu has been cut off? Well, just about the first thing AppChart tells you is about cut off menus, so you don't have to do that any more.

In my view the problem with AppChart is understanding what it is telling you. You know those boffin types. You are sure they have the answer to your question, but you are sometimes afraid to ask it because you get so quickly lost in the answer they give you. Well, AppChart can be a bit like that, but at least you can sit and think about what it is telling you for a while, without seeming rude.

Getting into AppChart is not as exciting as, for example, getting into ... well, some other things that are more exciting than diagnostic software. You must not be put off by the initial visual impact, which is rather daunting because so much information is packed onto the screen.

New View: Application Charter now has a Windows 'Viewer' for reading and displaying existing scans. See over the page for more details.



29





Abbreviations are used extensively, which makes the screens rather opaque, if you see what I mean.

However, the abbreviations are rather obvious — UM for User Menu, RE for Record Entry, and so on.

There is an on-line manual, but since it was obviously written by the boffin in the first place, and has only the most rudimentary index, it has to be approached in a spirit of "I am not going to be intimidated by this; I am going to enjoy using the Help function", rather than pleading "Please Help function, what do I do now?". There will also be a printed manual, but it was not available at the time of the review.

AppChart has limitations, of course, some of which are derived from
DataEase internals beyond the control of the people who wrote it, some from the cost of implementation, and some

because it would not be sensible for it to attempt to do everything. For example, AppChart will identify your control procedures for you, but if you have a control procedure inside a control procedure, it will call it a QBE; this is derived from a limitation of DataEase's internals. On the other hand, if you have a field called, say, Time Entered, I would expect it to flag the use of the word time as a reserved word, but it

doesn't.

Overall it is a valuable addition to the tool kit of any DataEase developer. I think it is especially relevant to the process of maintaining applications, rather than the initial writing. And since the rule of thumb is that an application often has ten times as much spent on maintenance during its life as was spent on creating it, anything that economises maintenance must be good news.

• Richard Seabrook is in independent DataEase consultant.

#### THE CHANGING CHARTER

Like many packages, Application Charter has undergone a number of often user-requested changes throughout its life. The most significant since it was first released over two years ago is the addition of a Windows 'viewer'. This gives a Windows frontend to the package, in a similar way that WinZip does with the PKZip suite. One important advantage is that printer handling is passed over to Windows, so if you can use any printer for which you have a driver — including fax cards.

One of the most powerful AppChart tools is the Data Dictionary, This gives you instant access to where fields of similar or identical names have been used throughout the database. Now that checklist has been extended to include fields in data-entry front ends.

AppChart now deals with imports, and will also let you know if you have an import that is not used via a menu or procedure. This could be a great way to find imports that may originally have belonged to other databases, perhaps in the days when the developer created all their applications in the same directory.

Elements can be listed in date as well as alphabetical order. In time it is planned to release a version that will read DataEase 5.x for DOS and also DataEase for Windows; at the moment this viewer, and Application Charter in general, works with 4.x only.

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Unique.Exe	£25	site licence	
Jada 4.53 Upgrade	£60	and master disk	
<b>Increase Upgrade</b>	£100	and master disk	
HandTools Upgrade	£60	and master disk	
HandTools Develope	Upgrade	£115	
JADA PACK - Jada	JADA PACK - Jada AND Incr		
<b>Handtools and Powe</b>	rTools		£265
formExpress!			£375
<b>Unique for Express</b>		Site	£45
<b>Unique for Express</b>		Distrib	£200
Both: .Exe & .DLL		£3	00/£65
KILLREP - Uninsta	ller		£150
NEW: DE Assist			£195

All these add-ons work with 4.53 or Express and some may be compatible with 5.0 or DFW. Call for details.

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Doing DataEase properly...



# Laser Shar



he introduction to the manuals says it all: "The purpose of the [Jada LaserJet] CDF library is to provide the DataEase user with the ability to more fully exploit the ... HP LaserJet printer. It is assumed that you are somewhat familiar with HP PCL and disgusted with trying to use it via DataEase."

Well, you only have to read any articles we've done on PCL (Printer Control Language) and DataEase to realise the best thing to do is to turn that page very quickly.

This is a collection of around 100 custom defined functions from the same developer that brought you JADA Tools and Increase, Jerry Netherton. Jerry has

#### **Product: LASERJET CDF LIBRARY**

Main Purpose: BETTER PRINTING WITH HP LIETS

#### Reviewed: ADRIAN JONES

been working on printing CDFs, mainly in response to requests for bar coding solutions, although this set contains far more than just bar code commands. Like most CDF libraries, we are dealing with DOS 4.53, not Windows.

For example, you can control the position, orientation, font, style and size of text strings. There are tools for drawing lines, boxes and other shapes, including shading. You can create printer macros (set up a template once for each page, then repeat that on each subsequent page by simply calling the macro). There are miscellaneous functions, such as number of copies to print, redirecting

Accompanying the library is a demonstration database. Let's take a look

let add PCX and other image

files.

at one of the procedures that creates a definitely impressive output (form 52), to get some idea of how the author can see the library used, and to see how such a form was put together (Figure 1 - I've edited the DQL for clarity).

And the result, as you can see, looks very smart. The downside, though, is that you've had to work out, by measuring on a piece of paper, the location of every single item you want printed, and then enter this into a form. This is less brain-killing than doing the same using PCL, but lacks the intuitive feel of using a good DTP or word-processing

Far easier to follow and achieve, though, is Figure 2,

which creates the front page of the manual. I don't think that is too complicated, and I imagine would actually be quite fun to set up.

#### **Behind Bars**

This is the first CDF library to do anything with bar codes; up to now you've had to use a TSR or similar device. There are eleven symbologies: Codabar. Code 128, Code 39, Code 93, EAN 8 and 13, UPC A and E, PostNet, Interleaved 2 of 5, and some presumably specified by the Sears company. If you don't understand any of what I'm talking about, take a look at Dialogue, Sept 93, pages 6-10. But briefly, UPC (Unique Product Code) and EAN (European Article Number) are used most commonly for groceries and similar products. PostNet is specifically for the US postal service. Code 39 allows

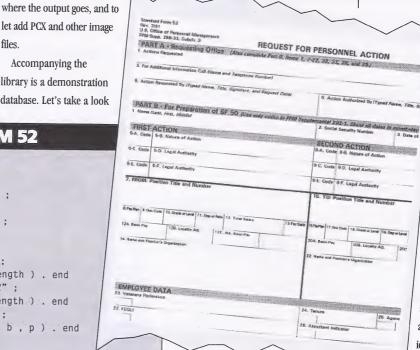
for variable length codes.

There are options for returning checksum digits. Each function lets you control the width of the bars, where it will appear on the paper, height, and so on. The codes are printed using PCL only, not raster graphics or fonts, which means they should print quickly.

I can imagine the following. Department wants a form, so roughs one up and hands it to the graphics design people to visualise. You tell them that they

Figure 1: FORM 52

i	
	define temp "i" number .
I	i := reset() .
	for Univers with Name = "Form 52";
I	list records
	univers ( font , style , wgt ) ;
l	
I	at_say ( x , y , mess ) .
	end
	for h_lines with Name = "Form 52";
	list records h_line (x, y, length) . end
	for v_lines with Name = "Form 52";
	list records v_line ( x , y , length ) . end
1	for s_box with Name = "Form 52";
ŀ	Total Sept Wilding Wallet Total Sept Sept Sept Sept Sept Sept Sept Sept
	list records s_box ( x , y , a , b , p ) . end
	i := reset() .





have the following limited range of fonts, etc. Then you work out what appears where. It'll take a little while to get this going, but once you're there, you can make modest adjustments easily without going back to the drawing board. (Okay, that's big company stuff. Chances are you're like me, and you'll have to do all three areas yourself. But the procedure amounts to the same.)

Once you've worked through the principles, using this library is straightforward. I can see catalogues and price lists being churned out with neat headers and footers, and dot-leaders drawing the eye from item to price.

And the fact that this library contains those bar codes will, I imagine, account for quite a number of its sales.

• This review was based on a beta version of the software. The Library of LaserJet CDFs is available from PinPoint Corp, Springfield, VA, USA, tel: (703) 379 8111. Also available from PLM in Wilmington, DE, USA, tel: (302) 654 1727. Can also be sourced through the DataEase User Group in the UK, tel +44 (0)1603 762806, and TrainEase, tel: +44 (0)1268 270022.



A Library of LaserJet CDFs

Jada Development Corp.

#### **Figure 2: MANUAL COVER**

```
define temp "I" number . assign temp I := landscape() . list records univers ( 126, 1, 3 ) ; code_39(9,2,180,70,2,"Jada"); outline(185.5,60,2,10,"Jada"); CG_Times(39,1,0); drop_shadow_center(170 , 120 , 140 , 2 , 21 , "A Library"); drop_shadow_center ( 170 , 120 + 18 , 140 , 2 , 21 , "of"); drop_shadow_center( 1 70 , 120 + 18 , 140 , 2 , 21 , "of"); drop_shadow_center( 1 70 , 120 + 18 , 140 , 2 , 21 , "of"); cG_Times(33,1,0); kern_say(180,215,127,"Jada Development Corp."); eject(); reset() .
```

### If you're looking for an answer, chances are it's bere

Dialogue's Aftermarket Buyer's guide is the most comprehensive listing anywhere of DataEase enhancing products. From CDF libraries that dramatically increase what is possible, through documenting and development tools to books and training videos. The guide includes when the product was reviewed in Dialogue and/or ExpertEase. If you require a back issue of Dialogue, call +44 (0)1603 762806. For back issues of ExpertEase, call DataEase Customer Services on +1 (203) 374 8000.

#### ACCESSORIES

#### **Function Key Command Template**

Plastic template that sits over top of function keys to show DE key combinations. Reviewed Dialogue: Vol 3 Iss 3 Pg 12

From: Software Studio.

#### ACCOUNTS

#### Systematics Accord

Full accounting suite. Modules include sales, purchases, nominal ledger, payroll. Latest addition is a Sales Order Processing module. Also includes Link, which allows seamless integration with DataEase applications. Reviewed Dialogue: Sept 93, Aug 95

From: Sapphire Systematics (Worldwide).

#### BAR CODING

#### Overdrive

TSR for printing bar codes. Can specify not only type of code and size, but can also rotate text, add boxes and produce printouts useable for many forms of packaging etc. Reviewed Dialogue: Sept 93 Pg 6 From: SB Electronics (UK).

#### PrintBar II

TSR that uses special code in DQL output to change alphanumeric data into one of several types of bar code. (Bear Rock have also recently brought out a Windows product that translates text into bar codes, and uses bar code fonts which you can print at any size.) Reviewed Dialogue: Sept 93 Pg 6

From: Bear Rock Technologies.

#### SoftSon

Read bar code data from a serial CCD scanner or wand. Can understand function and control keys — such as F2-SAVE — that form part of the bar code. So as well as translating bar code data into ASCII, you can save or update records without switching awkwardly between bar code read and computer keyboard.

From: The DataEase User Group; Soft Options.

#### BOOKS

#### DataEase 4 Training Guide

by Tony Tambyrajah. ISBN 0-273-03264-X. Tutorial guide to DE 4 covering form design, data-entry and quick reports.

From: Computer Manuals Ltd.





#### **DataEase Product Support Bulletins**

Collation of all the technical hints and tips published by DataEase in their Link newsletters. Published annually, Volume 1 covers up to 1989, with a volume per year up to 1993 (five volumes to date).

From: DataEase International (UK).

#### DataEase: Suggestions, Hints & Tips

By Richard Laidler. Covers many DE tricks, such as using wild cards in relationships. Many ideas based on DataEase User Group's own Tips and Tricks disk. Includes examples on disk. Reviewed Dialogue: Vol 3 Iss 3 Pg 22

From: RA Laidler; The DataEase User Group (Worldwide); PLM Consulting.

#### Exploring DataEase I, II & III

By Martin Fox. Future Communication Systems, 1990. ISBN 0-89588-689-8. Colection of advanced tips and tricks for 4.2. Reviewed Dialogue: Vol 2 Iss 1 Pg 26 From: DataEase International (USA); Martin Fox; Future Communications Systems; The DataEase User Group; PLM Consulting.

#### Hitchhiker's Guide to DataEase

By Gary Beard. ISBN 1-85058-505-9. Latest book out on DE. Flawed. Reviewed Dialogue: Jan/Feb 94 From: Computer Manuals Ltd.

#### Illustrated DataEase 4.

by Helen Banner. David Fulton Publishers, 1990. ISBN 1-85346-124-5. Tutorial for newcomers covering form design, record entry and quick reports. Reviewed Dialogue: Vol 1 Iss 4 Pg 19 From: Computer Manuals Ltd; DataEase International (UK).

#### Introduction to DataEase

by Jim Townsend. Published by QUE. From: PLM Consulting.

#### Masterina DataEase 4.2

by Susan Harmon. Sybex. 0-89588-689-

8. General introduction to 4.2 from record entry to DQL. Reviewed Dialogue: Vol 3 Iss 6 Pg 20. From: Computer Manuals Ltd.

#### **Understanding DataEase**

By Paul Dlug. Scott, Foresman and Co, 1989. ISBN 0-673-18836-1. Introduction to 2.53. Reviewed Dialogue: Vol 1 Iss 2 Pg 21 From: Computer Manuals Ltd.

#### Using DataEase

by Walter R Bruce III. Que. ISBN 0-88022-465-7. Novice introduction to DE 4. Reviewed Dialogue: Vol 1 Iss 3 Pg 18 From: Computer Manuals Ltd.

#### Using the DataEase Query Language

by Jeff Roberts and Frank Davis. Of use to the advanced user wishing to use DQL for 2.53.

From: Bill Brinton Publisher; PLM Consulting.

#### **CLIBRARIES**

#### DataPlus C Library for DataEase

Allows 'C' program calls to interogate DataEase applications. Extend DE capabilities and functions, such as adding real-time processing, and helping with complex DQLs. Will also reorganise RDRR and REPO files, and print DE form and field characteristics. Reviewed Dialogue: Vol 3 Iss 5 Pg 22

From: The DataEase User Group; Hill Croft Information Tech.

#### **NEW/UPDATE**

#### Laser CDF Library

Over 100 CDFs for better output to HP Laserjets from DataEase. Includes a set of bar code symbologies. Fonts, rules, shading, PCX and other images files can all be controlled direct from DataEase, without the need to master PCL. Reviewed Dialogue: August 1995

From: PinPoint Corporation; PLM Consulting; The DataEase User Group; Trainease.

#### **Techworks Engine**

An API that accesses DataEase data from application programs written in C. Reads form and procedure definitions, data records, verifies use name and password, and more. Reviewed Dialogue: Vol 3 Iss 2 Pg 14 Reviewed ExpertEase: Vol 3 Iss 6 Pg 14 From: Techworks International; The DataEase User Group.

#### CDFS

#### BAR.EXE

Two CDFs that allow you to add US Postal bar codes to envelopes and other material.

From: Jada Development Corp; PLM Consulting.

#### **CommTools**

A collection of communications-oriented CDFs, which can address both your serial ports and your modem, and provides a full suite of programming functions for managing comms, faxes, terminal sessions, etc.

From: LANimation Software.

#### ExLookUp

Looks up data from an external (DataEase) database. The library has recently been updated. Firstly to include accessing any appropriate indices in the other database. Secondly, to the existing lookups to text, numeric string, date time and number values have been added statistical lookups, such as sum of, count of, highest and lowest of. Reviewed Dialogue: May 1994

From: Equação Informatica; The DataEase User Group.

#### HandTools 2.0

allows you to manipulate DOS, redirect DQL output, improve screen design, write help systems, do bitwise operations, manipulate text, log activity, browse report files, convert data, execute DOS programs, and more. Will work with DOS 5.0 if the function doesn't specifically

reference DataEase internal information. A fully 5.0-compatible version is underway and will be available when ready to all version 2 users for a small charge. Reviewed Dialogue: May 94

From: LANimation Software (USA); PLM
Consulting (USA); SysCon Datentechnik GMBH
(Germany); Datasource Advanced Systems (USA); Trainease (UK); The DataEase User Group.

#### InfoTools for DOS and OS/2

60 CDFs, to return ASCII on HEX value of a character, play a song, centre text in a field, check existence of a directory or file, get the maximum and minimum of up to ten values, convert names to proper case but keeping "McFly" spelt correctly, jointext without nesting, stop user typing a wild card in an indexed field, amongst others. Reviewed Dialogue: Vol 3 Iss 6 Pg 23

**From:** InfoSource Development (Worldwide); The DataEase User Group.

#### PowerTools CDFs

At their most complex, PowerTools functions transform DOL into 'Super-DQL', providing a complete and customisable windowed interface, allowing complete control of all keyboard input and screen output. Can add a calculator, calendar and true 'memo' fields with text editor. Can create customised pull-down menus, execute a DQL according to data values. Will run with DOS 5.0 unless the function specifically references DataEase internal information. Reviewed Dialogue: March 94 From: LANimation Software (USA); PLM Consulting (USA); SysCon Datentechnik GMBH (Germany); Datasource Advanced Systems (USA); Trainease (UK); The DataEase User Group (UK).

#### **Techworks CDF Library Vol 1**

Over 30 CDFs that let you dial a phone number, display a pop up calculator, identify forms needing regoranisation, treat DE data as arrays, perform date maths with four-figure years, retrieve



#### AIS

ADVANCED INFORMATION SYSTEMS

- Full Consultancy Service
- Resource Management
- System Development
- DataEase to Access Migration
- On Line support (Rapid Response)
- 20 years combined IT experience
- Network Support
- Competitive Rates

#### AIS

The Coach House (North), Churchford Farm, Capel St Mary, Suffolk IP9 2LA Tel: (01473) 312141 Fax: (01473) 312151





values from Microsoft SQL server, and read from and write to operating systems files from within a form or DQL, amongst others. Supplied for both DOS and OS/2. Reviewed Dialogue: Vol 3 Iss 6 Pg 2

From: Techworks International; The DataEase User Group.

#### Unique

Replaces the "sequence from" operator to eliminate sequencing problems on networks. Also now available as a .DLL file for Express/DfW.

From: Azatar Microsystems (Worldwide); Trainease (UK); The DataEase User Group.

#### **DEVELOPMENT TOOLS**

#### **DE Assist**

Stand alone utility DE Assist is designed for developers to better manage their applications. You can quickly reorganize, edit, sort, and modify DataEase system forms, edit SQL server, database, and table settings, create DIN files with a variety of options, search for fields or text, compare two databases and traverse the application menu structure. It allows powerful cross referencing with live, real time presentation of reports on screen.

Demo on CompuServe. Latest version features ERM-style diagram of a form and its relationships.

From: PC Database Solutions; The DataEase User Group: Trainease.

#### Investigator

Analytical tool kit allowing crossreferencing of forms and fields; checks indices for likely problems with relationships; gives entity relationship diagram for the database, plus diagram of how menus and forms fit together. From: N.W. Richards (Worldwide).

#### Modellator

CASE tool to design database form structure as "entity relationship" to create valid data structure before even using DE. Module allows "reverse engineering" to build entity model from existing DE application. Now available for Windows. A restricted version of Modellator is included in DataEase for Windows dealing specifically with DataEase. The full Modellator allows data-structures to be moved from a variety of databases, including SQL, Access & dBASE. Reviewed Dialogue: Vol 3 Iss

From: The DataEase User Group (Worldwide except Scandinavia); MetodeData AS (Scandinavia).

#### **DOCUMENTATION**

#### **Application Charter**

Produces a flow chart of a DE application. Many tools allowing user to search through DQLs and field derivation formulae, locate used forms and procedures, find non-existent menu options, trace global variables through DQLs, write DQL to text file, document entire database. Flow chart, analysises and documents can be printed. NEW: now has Windows interface! Reviewed Dialogue: July/Aug 93, Aug 95 From: The DataEase User Group (Worldwide).

#### DE Dod'r

(Short for "Documentor", not "doctor"!) Creates extensive documentation for forms and DQLS, using the standard DataEase printouts, but improving on their content. Can choose which forms/DQLs to print, allowing both selective and comprehensive documenting "in one go". Most recent version out August 94, adds two new

utilities. "Search" will run through all names of forms, DQLs, fields, menus looking for a text string. "Clean" to remove files from a directory that are not part of your application. Also includes new menu front end. Reviewed Dialogue: Mar 94 Reviewed ExpertEase: Vol 4 Iss

From: Shelby Smith & Associates; Trainease (UK); The DataEase User Group.

#### IncrEase

This product has impressed me more and more over the past months. It creates from any 2.x or 4.x database another DataEase database, this time containing data about the database itself. So, for example, there is a field on a form containing all your DQL, a line per field. Therefore you can write DataEase reports to find out more about vour database. It also comes with routines for completely or partially documenting your system. Reviewed ExpertEase: Vol 2 Iss 7 Pg 13 From: PinPoint Corporation (worldwide);

Trainease (UK); The DataEase User Group.

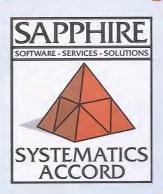


#### COMMUNICATIVE

Transferral of DataEase transactions and customer/supplier details to and from Systematics Accord can be done with a touch of a button using Systematics Accord Link.

#### **EASY TO USE**

Systematics Accord is incredibly easy to use: in fact, voted top on ease by Which Computer? for two consecutive years. David Carter in What PC? commented "...the detailed Aged Analysis is the best designed report we have ever seen in any accounting package."



#### **SYSTEMATICS ACCORD** is the exceptionally communicative, extremely easy to use yet powerful accounting suite from

#### SAPPHIRE SYSTEMATICS.

"With Link, the instructions to not only load the program but also find the import file and send it to the correct module in Accord can be specified in the program call. You don't hang around in Link after it has done this; it's straight back to DataEase and on with the next task.' Dialogue, September '93

#### **POWERFUL**

Systematics Accord gives up to nine levels of analysis, providing ultimate management information. Posting to and reporting on any period in any year allows ultimate flexibility.

The Systematics range of software has been installed in over 60,000 sites in the UK and overseas.

For more information on linking Systematics Accord to DataEase, please telephone the Systematics Hotline on 0181 553 3720, or fax us on 0181 478 7939

THE COMPLETE BUSINESS **ACCOUNTING & PAYROLL SOLUTION** 



#### **EXPRESS UTILITY**

NoMenu disables (so they display as grey) most of the topline pull-down menu options in Express, effectively turning Express into a runtime program. Helps developers control how the Express interface is used. Reviewed Dialogue: May 1994 From: Equacao Informatica; The DataEase User

#### FAX/MODEM

#### FaxEasa

Not so much a program as a service that ties together fax software, fax/modems and DataEase. Can send printouts straight from DE to a fax line, and allows delayed sending and faxing to several numbers at once. Works across many network topologies, and will operate with several phone lines at once to minimise

delay. Will also work with most other Windows and DOS software. Reviewed Dialogue: June 1994

From: Genesis Database Services Ltd; The DataEase User Group.

#### GRAPHS

Displays ten different graph types. Integrates with DataEase through

"program call" or similar. Embed in ASCII file both data and graph instructions (type, fonts, colours, etc) but can change easily once in Akrograf. Save graphs as .PCX files to use with other packages. Reviewed Dialogue: Sept 93 Pg 14 From: The DataEase User Group (Worldwide except Scandinavia); Easy Systems AS (Scandinavia).

#### SUPPLIERS DETAILS

American Training Internatn'l

12638 Beatrice Ave, Los Angeles, CA, USA, 90066. Tel: +1 310 823 1129 Fax: +1 310 827 1636.

Azatar Microsystems

6780 Pittsford-Palmyra Road, Fairport, NY, USA, 14450-3355. Tel: +1 716 223 2300 Fax: +1 716 223 3484 Sales 800 724 1223.

**Bear Rock Technologies** 

4140 Mother Lode Drive, Suite 100, Shingle Springs, CA, USA, 95682-8038. Tel: +1 916 672 0244 Fax: +1 916 672 1103 Sales: 800 232

**Bechmann Management Consults** 

Highways Cottage, Butlers Dene Road, Woldingham, Surrey, UK, CR3 7HD. Tel: +44 (0)1883 652621 Fax: +44 (0)1883 652730.

Bill Brinton Publisher

San Fransisco, CA, USA, . Fax: +1 415 392 3041 .

Computer Manuals Ltd

30 Lincoln Road, Olton, Birmingham, UK, B27 6PA. Tel: +44 (0)121 706 6000 Fax: +44 (0)121 706 3301.

**Database Systems Development** 

Pinderbrook House, Darkey Lane, Stapleford, Notts, NG9 7JH. Tel: +44 (0)115 949 7347 Fax: +44 (0)115 939 9344.

DataEase International (UK)

160-162 Cranbrook Road, Ilford, Essex, UK, IG1 4QR. Tel: +44 (0)181 554 0582 Fax: +44 (0)181 518 4150.

DataEase International (USA)

7 Cambridge Drive, Trumbull, CT, USA, 06611. Tel: +1 203 374 8000 Fax: +1 203

The DataEase User Group

Anchor House, Anchor Quay, Norwich, Norfolk, ENGLAND, NR3 3XP. Tel: +44 (0)1603 762806 Fax: +44 (0)1603 762807.

**Datasource Advanced Systems** 

2538 S Westgate Avenue, Los Angeles, CA, USA, 90064-2742. Tel: +1 310 281 7420 Fax: +1 310 479 8988.

**DataWare Solutions Ltd** 

10 Broadway, Grays, Essex, ENGLAND, RM17 6EW. Tel: +44 (0)1375 394799.

Easy Systems AS

Nytnvn 3 Hebekk, PO Box 418, Skiu, NOR-WAY, N-1401. Tel: +47 64 876841 Fax: +47 64 877202

**Electrovision UK Ltd** 

Hamble Point Marina, School Lane, Hamble, Southampton, Hants, UK, SO3 5JD. Tel: +44 (0)1703 452221 Fax: +44 (0)1703 455144.

Equacao Informatica

R Santa Isabel 137 CJ 32, Sao Paulo, BRASIL, 01221-010. Tel: +55 11 221 3415 Fax: +55 11 221 3930.

Martin Fox

92 Summit Way, Syosset, NY, USA, 11791. Tel: +1 516 496 7121 Fax: +1 516 496

**Future Communications Systems** 

92 Summit Way, Syosset, NY, USA, 11791. Tel: +1 516 496 7121.

Genesis Database Services Ltd

Lesbourne House, 49a Lesbourne Road, Reigate, Surrey, UK, RH2 7JS. Tel: +44 (0)1737 225775 Fax: +44 (0)1737 248117.

Hill Croft Information Tech

56 London Road, Loughton, Milton Keynes, Bucks, UK, MK5 8AQ. Tel: +44 (0)1908 666244 Fax: +44 (0)1908 666244 CIS 100112,3115

InfoSource Development

5521 Greenville, Suite 104-339, Dallas, TX, USA, 75206. Tel: +1 214 235 4551 Fax: +1 214 669 2219 CIS 72050,3706.

Jada Development Corp

PO Box 8125, Springfield, VA, USA, 22151. Tel: +1 703 379 4444.

RA Laidler

Pantiles, Rectory Road, Middleton, Sudbury, Suffolk, UK, CO10 7LN. Tel: +44 (0)1787

**LANimation Software** 

8155 Santa Clara, Suite 100, Dallas, TX, USA, 75218. Tel: +1 214 324 4778 Fax: +1 214 319 8782 CIS 72650,1440.

**Management Software Solutions** 

8 Ash Hill Close, Bushey, Watford, Herts, UK, WD2 1BW. Tel: +44 (0)181 420 4506 Fax: +44 (0) 181 420 4506

MetodeData AS

Stubbratan 18, Kolsas, NORWAY, N-1352. Tel: +47 67 138197 Fax: +47 67 138147.

**PC Database Solutions** 

163 Westside Drive, Oakville, Ontario, CANADA, L6K 1P2. Tel: (800) 392-8393.

**PinPoint Corporation** 

5055 Chesterfield Road, Suite 1000, Arlington, VA, USA, 22206. Tel: +1 703 379 8111 Fax: +1 703 379 3834 CIS 73303,2133.

**PLM Consulting** 

816 Washington Street, Wilmington, DE, USA, 19801. Tel: +1 302 984 2698 Fax: +1 302 654 1727.

Relational Data Sys (Florida)

2581 SE Oaklyn St, Port St Lucie, FL, USA, 34984. Tel: (407) 871-2884.

Relational Data Sys (Oregon)

18780 NW Rock Creek Cir #156, Portland, OR, USA, 97229. Tel: (503) 629-5792 .

18 Waltham Rise, Melton Mowbray, Leics, UK, LE13 1EJ. Tel: +44 (0)1664 68335.

Sapphire Systematics

Unit 7, Clements Court, Clements Lane, Ilford, Essex, UK, IG1 2QY. Tel: +44 (0)181 553 3720 Fax: +44 (0)181 518 4150.

SB Electronics

Arden Grove, Harpenden, Herts, UK, . Tel: +44 (0)1582 769991 Fax: +44 (0)1582 461705.

Seltek Systems Ltd

38 Westway, Caterham, Surrey, UK, CR3 5TP. Tel: +44 (0)1883 341697 Fax: +44 (0)1883 341343.

Shelby Smith & Associates

P.O. Box 392, Mount Freedom, NJ, USA, 07970. Tel: +1 201 989 8833 Fax: +1 201 989 0236

Amisfield House, Amisfield Road, Hipperholme, West Yorks, UK, HX3 8NE. Tel: +44 (0)1422 204500 Fax: +44 (0)1422 204501.

Software Appeal

153 Merrick Road, Suite 201, Merrick, NY, USA, 11566. Tel: +1 516 223 9796 Fax: +1 516 223 9796 CIS 76660,2620.

Software Paradise

Caerphilly, WALES, CF8 1HE. Tel: +44 (0)1222 887521 ext 17 Fax: +44 (0)1222 862209.

Software Studio

10 Asa Court, Old Station Road, Hayes, Middx, UK, UB3 4NA. Tel: +44 (0)181 561 2667 Fax: +44 (0)181 561 2484.

Solana Software International

3751 Sixth Avenue, San Diego, CA, USA, 92103. Tel: +1 619 291 1553 Fax: +1 619

Springboard UK Ltd

Millstone House, 34 Hilland Rise, Headley, Hants, UK, GU35 8LX. Tel: +44 (0)1428 712539 Fax: +44 (0)1428 712379.

SysCon Datentechnik GMBH

Bethelweg 38a, Epfenbach, WEST GER-MANY, 74925. Tel: +49 7 2634359 Fax: +49 7 2634358.

Techworks International

164 Kings Highway North, Westport, CT, USA, 06880. Tel: +1 203 221 1500 Fax: +1 203 221 1330

Tools and Techniques Inc

1628 West 12th Street, Austin, TX, USA, 78703. Tel: +1 512 482 0824 Fax: +1 512 482 0976 Sales 800 444 1945.

1 Capricorn Centre, Cranes Farm Road, Basildon, Essex, UK, SS14 3JA. Tel: +44 (0)1268 270022 Fax: +44 (0)1268 272086.

Trans-Micro Inc

7700 NW 135th. Street, Reddick, Florida, USA, 34983. Tel: (800) 749-2335; (904) 591 Fax: (904) 591-1096.

Transformation Software

17 Thame Park Road, Thame, Oxon, UK, OX9 3XD. Tel: +1 (0)1844 261456 Fax: +1 (0)1844 260056.

WITTCo Resources

39 Shore Front Park, Norwalk, CT, USA, 06854. Tel: +1 203 838 9890 Fax: +1 203 838 7805.





#### MagiGraf

For Windows. Produces bar, pie, Gannt, line, log/lin, area, scatter and high/low graphs and charts in 2D and 3D. Reads an ASCII file for data and instructions, so you can "automatically" generate the graphs through a DQL or a program call. Reviewed Dialogue: Nov 93

From: Soft Options; The DataEase User Group.

#### Soggy

Low-cost package for turning data into graphs.

From: Soft Options; The DataEase User Group.

#### **MIGRATION TOOL**

#### **Migration Charter**

helps you prepare an application for migration to DfW and/or convert to DataEase DOS 5.0. Your existing 4.53 application is analysed for noexist fields, menus DQLS and forms with the same names, output and message statements and many other aspects that you should look out for before you migrate. Produces a pre-migration checklist document. Sister product to Application Charter. From: The DataEase User Group.

#### PICTURES

#### DEPics

Display photographs, technical and freehand drawings in DE screens. Reviewed Dialogue: Vol 3 Iss 1 Pg 10 From: Soft Options; The DataEase User Group.

#### Imagina For DataEase

Not only display high-quality pictures and documents in forms, but also scan them in and print them out in reports. The complete solution for pictures and DE DOS. Reviewed Dialogue: Oct 93 Pg 10

From: Solana Software International (USA);
Genesis Database Services Ltd (UK); The DataEase User Group (Europe and Africa); DataWare
Solutions Ltd.

#### **Imaging with Envision**

CDF library that scans, displays and prints images with DataEase.

From: Software Appeal (Worldwide).

#### PRINTING

#### Check FactoryEXPRESS!

A sister product to FormEXPRESS!, Check Factory's sole purpose is to produce "Magnetic Ink Character Recognition" (MICR) checks on HP laserjets for use with American banks. The TSR ensures that checks produced meet the stringent requirements of the American Bankers Association. It is by no means DataEasespecific, and works with a wide range of

accounting software. Oh, and it makes it all easy!

**From:** Trans-Micro Inc; Trainease; PLM Consulting.

#### **Epson to Postscript Translation Utility**

Small TSR for translating Epson text and printer commands to Postscript for better printing. Reviewed Dialogue: Vol 2 Iss 3 Pg 18

From: Seltek Systems Ltd (worldwide).

#### FormExpress!

Create form layouts using your favorite WP or DTP package, then use this layout to print PCL-type files to your HP LaserJet without having to worry about HP-PCL code. You just add the necessary Express commands — simple delimited ASCII statements — to each page, and FormExpress! combines your data with your layout to produce any kind of form you require, from insurance claims to bank checks. Reviewed Dialogue: Mar 95 p33 From: Trans-Micro Inc; Trainease; PLM Consulting.

#### **TEACHING AIDS**

#### DataEase for DOS Videos

Set of four videos that takes you from beginner to advanced DQL. Video 1 covers designing forms, relationships, menus, users and QBE; Video 3 expands on video 1 and includes utilities, system maintenance and administration and chain menus; Video 4 looks at DQL. Video 2 is the "odd-one out"; it is aimed at using an application, not creating it. Comes with copy of the example database used to illustrate the videos. Available on VHS/PAL and possibly others (call for details). Reviewed Dialogue: Sept 93 Pg 23 From: Springboard UK Ltd (Worldwide); The DataEase User Group.

#### Teach Yourself DataEase

Disk based training course. Two disks—novice and advanced, plus handbook.
Reviewed Dialogue: Vol 4 Iss 2 Pg 19
From: Electrovision UK Ltd (UK, Eire, Europe);
American Training Internatn'l (North America).

#### TOOLKITS

#### **Jada Tools Plus**

Powerful tool for examining applications. Will re-order form and DQL names, change case, reorganise system forms, and 35 other features. Reviewed Dialogue: Vol 1 Iss 5 Pg 16 Reviewed ExpertEase: Vol 1 Iss 2 Pg

From: PinPoint Corporation (worldwide); Jada Development Corp; Trainease (UK); PLM Consulting.

#### UNDX

#### DataEase for Unix

A native UNIX version of DE 4.2 that to all extents and purposes is identical to DOS version, except it's UNIX! Reviewed Dialogue: Vol 3 Iss 3 Pg 16

From: Transformation Software (Worldwide)

#### **USER INTERFACES**

#### FrontEnd Professional

Add cursor and function key control to DE. F-keys can be defined, assigning macros to a single button. New version includes over 60 commands. Can read from and write to the screen, copy and paste between forms, and even use temporary data in a macro. Reviewed Dialogue: Sept 93 Pg 19

**From:** Solana Software International (USA); The DataEase User Group (Europe and Africa).

#### UTILITIES

#### **Data Junction**

Converts data files to and from 60 other applications, including FoxPro, dBASE, Clipper, Paradox, Oracle, 123 and Btrieve. Data structures can be cleaned up, text searched and replaced, case of words changed, fields merged or split. Batch routine automates conversion.

From: Software Paradise (Worldwide); Tools and Techniques Inc; Database Systems Development.

#### **NEW/UPDATE**

#### Distributo

Quick and easy way to create .DIN files for maintaining distant applications. Reviewed Dialogue: August 95 From: N.W. Richards.

#### MenuEasa

Set of utilities to help you create your

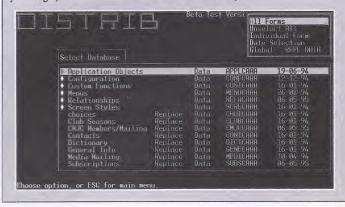
# Instant Distribution (just add water)

It's hard to say very much about a neat, focused and very straightforward to use package like Distributor. It deals solely with creating quickly files for maintaining 'remote' applications — .DINs and so on. At £25 (cUS\$38) this is a one-trick pony that is a much more economical alternative to Developer and even ZZDoesit.

So you locate a database and let Distributor work out the list of forms, queries and imports, how many records, when it was created, and so on. Then you can select all the forms, individual forms, or forms created since a certain date. You also specify globally whether you'd like to replace, replace with data, install or install with data selected items. The global setting just makes it quicker; you can change what you want to do with each form.

And so on for queries and imports (where the options are just replace or install). Finally, drop down to the 'Generate' menu option, enter a directory and a .DIN file name and hit return. Voila — instant distribution files.

For more details, contact Neville Richards on +44 (0) 1664 68335. (Yes — you're right, it's a rare DataEase add-in written in the UK.)





menus. Change the order of options on your menus. Move options from one menu to another. View menu changes without leaving DataEase. View the structure beneath any given menu. Print guide to the levels or export them for documentation.

From: Management Software Solutions.

#### Passport

Record all attempted access to application. Create a customised sign-on screen, including adding company logo. Also has a screen saver. Reviewed Dialogue: Vol 4 Iss 1 Pg 15

From: The DataEase User Group (Worldwide).

#### POC2LIET

Add logos, pictures and even signatures to printouts. For HP LaserJets and 100% compatibles.

From: Soft Options; The DataEase User Group.

#### **ZZDoesli**

Easy way to create .DIN files for installing updates and modification to remote applications. Identifies "dead" files (.tmp, error, etc). You can attach comments to forms and procedures, and test the performance of different DQLs

and even how your application would run on different platforms, such as Windows. Reviewed Dialogue: Sept 93 Pg 22 From: WITTCo Resources; Trainease (UK).

#### **VERTICAL APPS**

#### **LedgerMaster**

Written mainly for US, LedgerMaster covers many accounting ledgers, such as accounts recievable and payable, and other journals. Also keeps control of inventory, quotation to order to invoice to statement, lets you manage multiple checkbooks, and, as, a DataEase application, will let you develop it further yourself.

From: Relational Data Sys (Florida); Relational Data Sys (Oregon).

#### Mailsort for DataEase

Specifically for UK postal service. Royal Mail's Mailsort is a way of making significant savings on bulk mailings by sorting letters into sorting areas and bundling them into bags. However, the process is actually very complicated. Mailsort for DE, which is on the Royal Mail's list of software to help with the service, removes the complication. Works

by you modifying DQL to point at your existing address forms. This is an application written in DataEase.

From: Bechmann Management Consults.

#### **Meeting Tral**

Designed to handle all aspects of meeting planning and organization. Gives complete pre- and onsite registration capabilities. Any meeting can have multiple sessions and fees, tracks speakers and attendance. Handles both air and hotel arrival/departures, plus special facts such as non-smoking rooms. 150+ standard reports provided. Rated Number 1 software program by Meeting Planners International, in use in over 1,500 organizations in the US. Available in standalone and networked versions, and also for Windows. Demo disks available.

From: PLM Consulting

#### PeopleTrak, VendorTrak, ExhibiTrak, MeetingMatrix

Companion products to Meetingtrak. PeopleTrak for membership organizations, VendorTrak for the vendors you use at your meeting, ExhibiTrak for managing exhibitors, and MeetingMatrix, a CAD program for floor and room layouts. Demo disks available. From: PLM Consulting.

#### Calling All Product Producers & Distributors

This section of the magazine is due for a Spring-clean. Well, okay, it's not Spring, but you know what I mean. If there are any details that have changed, please get them to Adrian Jones at Anchor House, Anchor Quay, Norwich NR3 3XP, or via CompuServe 100143,1025.

#### DE Assist:

# The Interactive Analysis and Development Tool for DataEase

DE Assist
- interactive
and fast.

\* Note: for data integrity reasons, not all functions are that lets you explore your
database as you develop it.
Simply by running two
DOS sessions under
Windows — one for your

DE Assist is a powerful analysis tool

DataEase application, the other for DE Assist — you can

ALT-tab between Assist and the form, procedure or menu you are working on.

Unlike other analysis tools, Assist works directly with the files that make up your database. That means that as soon as you open a database with Assist, you can retrieve up-to-date information. So you can create a DQL or form, and use Assist to check out details elsewhere in the database.

Forgotten the name of a global variable? Don't open another procedure — get the answer from Assist.

Change an optional relationship name? Assist displays related forms in an easy-to-understand entity diagram so you can modify and add field derivations easily.

#### And much more ...

- Look up form definitions from another database to keep consistent and compatible.
- Tools to help you merge two databases together.
- Compare development and live applications to see how they differ.

- At-a-glance view of related forms, related fields and relationship names.
- Clean out all records from selected forms to create a virgin database.
- Rename forms and procedures, and reflect those changes in the menus and relationships (very useful if you're planning to migrate to Windows.
- Build a tree showing what procedures are called via a control procedure to any level.

#### AND ... it's fast!

PLUS: tools for SQL; field name and type searches; tag items added since a certain date; explore just unique and indexed fields ...

To order or for more information about DE Assist, contact the following:

NORTH AMERICA: PC Database Solutions, 163 West side Drive, Oakville, ON, CANADA. Tel: (800) 392-8393
UK: DataEase User Group, Anchor House, Anchor Quay, Norwich, NR3 3XP, UK. Tel: (01603) 762806

UK: TRAINEASE Ltd, 1st Floor, Capricorn Centre, Cranes Farm Road, Basildon, Essex, SS14 3JA, UK. Tel: (01268) 270022





#### CANADA

#### ALBERTA

#### **Calgary DEUG**

Contact: Gary Rogers, City of Calgary, 134-11 Avenue SE 3rd Floor, Calgary, Alberta T2P 2M5 Tel: (403)-268 3245.

#### **Edmonton DUG**



Contact: Jim Bodie or Stan Olenic. .

Contact Jim on (403) 498-8268 (email bodiej@freenet. edmonton.ab.ca) or Stan on (403) 448-0842. Group meets periodically; no membership charge.

#### **BRITISH COLUMBIA**

#### Vancouver/Victoria DEUG

Contact: Douglas Heatley, DGH & Associates, 4930 Old West Saanich Road, RR #3, Victoria, BC V8X 3X1 Tel: (604)-727 7268.

#### ONTARIO

#### **Metro Toronto DataEase User's** Alliance

Contact: Lawrence Fox, ComputerWizard Consulting 145 Thornway Avenue, Thornhill, L4J 7Z3 Tel: (905)-669 1710 CIS: 71533,1772.

Meets every other month, usually on the last Thursday, in different locations in the Metropolitan Toronto area. Meetings are held from 3-5 pm, with coffee starting at 2:45. News, a feature presentation, and an Open Forum (bring your DataEase problems and share your expertise) are all yours for the \$2.00 admission. Meeting months are usually Jan, Mar, May, July, Sept, Nov, but check with Lawrence to see if there's been any "slipage" say to the first week of the next. There is currently no charge for membership.

### Touch Base

So you like — or loathe — DataEase so much that you'd like to spend at least an afternoon in the company of other users? This section gives details of user groups as we know them across the world. Plus it lists the events of the DataEase User Group in the UK, who publish this magazine. If you run a user group anywhere in the world, please get in touch. The listing is FREE. Fax Adrian Jones on +44 (0)1603 762807 or e-mail him on CompuServe at 100143,1025.

#### Ottawa DEUG

Contact: Claudio Santurbano,

Drake Computer Training, 1292 Wellington Street, Ottawa, Ontario K1Y 3A9 Tel: (613)-722 5154.

#### QUEBEC

#### **Montreal DEUG**

Contact: Earl Wertheimer, The Wertheimer Works, 6697 Somerled, Montreal, Quebec H4V 1T5 CIS: 72113,3327.

#### UNITED KINGDOM

#### **DataEase User Group**

Contact: Marion Forsyth, Anchor House, Anchor Quay, Norwich, NR3 3XP, Norfolk Tel: 01603 762806 Fax: 01603 762807. Monthly meetings are free to members. Call Marion Forsyth to reserve a seat. 11 August 1995: "Network Tips and Tricks" in Inverness, Scotland, 2-5pm. 20 September 1995: "Using Data Model Manager to Build Version 5 Applications" in London 2-5pm. 30 October 1995: Annual European Conference, Commonwealth Institute, London, Promises to be the best vet ... so book early.

#### **IDUA: UK Branch**

Contact: Rob Hill, 1 Capricorn Centre, Cranes Farm Road, Basildon, Essex SS14 3JJ. Tel: 01268 270022 CIS: 10040,231... £35+VAT p.a. Membership includes subscription to newsletter Form and Query Fusion.

#### **UNITED STATES**



Contact: Carl J Warner, 4651 Wooddale Lane, Pelham, Alabama 35124-1033 CIS: 72567,3372. Focused mainly on xBase, are expanding member base to include all database products. Also covers client/server and middleware. Dues \$60 p.a. cover newsletter and BBS related expenses. Meets first Thursdays of each month, except July.

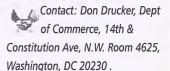
#### CALIFORNIA

#### Los Angeles DEUG

Contact: Rey Caunca, DataSource Systems, 218 North Cannon Drive, Suite C, Beverly Hills, CA 90210 Tel: (818)-501 8595 CIS: 71674,2243.

Meets every third Tuesday at 3247 Castle Heights Ave, LA. Newsletter, free snacks and tech tips on disk. No membership charge. Format of meetings: any announcement from DataEase; the meeting's topic; 3rd party product demos, if any; technical tips from Rey; Open forum (question and answers, shared experiences...) Since January have been demonstrating DE 5 for DOS and DataEase for Windows.

#### **Washington Area DEUG**



#### DELAWARE

#### International DataEase User



Contact: Debe Winkler, 816 Washington Street,

Wilmington, DE, 19801 Tel: (302)-984 2698.

21 September 1995: Annual conference, held at the Holiday In, Wilmington. Lots of technical discussions, meetings, products, fun, but very little sleep!

#### **GEORGIA**

#### **Atlanta DEUG**

Contact: Lee Padron, International Computer Systems, 3255 Brownwood Drive, Snellville, GA 30278 Tel: (404-979 4147 CIS: 76675,3101.

#### ILLINOIS

#### Chicago Area DEUG









#### **MASSACHUSETTS**

#### **Boston Area DEUG**

Contact: Earl Fretz, Moretech Business Associates, 7 Womponoag Street, Norfolk, MA 02056 Tel: (508)-528 2108.

#### MICHIGAN

#### **Detroit Area DEUG**

Contact: Roger Kuether, Custom Business Systems, 1036 Bernstein Road, Suite 104, Walled Lake, MI 48390 Tel: (313)-624 6087 CIS: 72767,1242.

#### **MINNESOTA**

#### Minnesota DEUG

Contact: Jack Swenson, Hamline University Security, 1536 Hewitt, St Paul, MN 55104 Tel: (612)-641 2100.

#### MISSOURI

#### St. Louis DEUG

Contact: Rick Leffler, American Family Insurance, P.O. Box 356, Arnold, MO 63010 Tel: (314)-296 4978.

#### **NEW JERSEY**

#### **New Jersey DEUG**

Contact: Shelby Smith, Shelby Smith & Associates, P.O. Box 392, Mt Freedom, NJ, 07970 Tel: (201)-989-8833 CIS: 71021,1150.

#### **NEW YORK**

#### **Fairfield Westchester DEUG**

Contact: Med Ferdandez, Computer Soft, 175 East Main Street, Brewster, NY 10509 Tel: (914)-279 5001.

#### **Long Island DEUG**

Contact: Lea Demaille, Franklin Hospital Medical Center, 900 Franklin Avenue, Valley Stream, NY 11580-2190 Tel: (516)-825 8800.

#### **New York DEUG**

Contact: Barry Kornfeld, The American Federation of Musicians, 1501 Broadway, Suite 600, New York, NY 10036 Tel: (212)-239 4802

#### **NYPC DataEase SIG**

Contact: Karen Umstot, 205 Third Avenue, Suite 9G, New York, NY, 10003 Tel: (212)-228 8392.

#### **Rochester DEUG**

Contact: Jaqueline Fegan,
Blue Cross & Blue Shield, 150
East Main Street, Rochester, NY
14647 Tel: (716)-238 4509.
Meets the last Thursday of every
month except July and November at
the Blue Cross and Blue Shield. Ring
to reserve — meetings may be cancelled if attendance is low.
Membership \$15 p.a.

#### OHIO

#### **Dayton Area DEUG**

Contact: David Garing,
Standard Register, 600
Albany Street, Dayton, OH, 454011167 Tel: (513)-443 1371.
Meets 1st Thursday of each month
except July at 6:30 p.m. Venue
rotates between Dayton and
Cincinnati (& sometimes Springdale).
Ranges from novice to advanced
level user. Meetings start with a formal presentation and end with an
open forum where users can present
their problems to the group. Free
disks with tips, etc. are often part of
the presentation.

#### **PENNSYLVANIA**

#### Pittsburgh DEUG

Contact: Ted Rohm, Micro Business Solutions 303 Berkshire Drive, Cranberry Twp Tel: (412) 779-1904 Fax: (412) 779 1905 CIS: 71330,2513.

#### TEXAS

#### **Dallas DEUG**

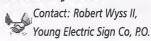
Contact: Clayton Stockdall, Sunset Savings, F.S.B. 4110 Lindberg Drive, Addison, TX 75244 Tel: (214)-490 8661.

#### **Houston DEUG**

Contact: Greg Evans, In Sync Micro Computing, P.O. Box 5621, Katy, TX 77491 Tel: (713)-578 7215.

#### UTAH

#### Salt Lake City DEUG



Box 8944, Salt Lake City, UT 84108 Tel: (801)-363 8900 .

#### WASHINGTON

#### Washington Software Assoc. Database SIG

Contact: Jeff Winchell, 10940 N.E. 33rd Place, Suite 206 Bellevue Tel: (206) 889-8880 CIS: 76066,533.

Monthly evening meetings on general (not DE specific) database issues. Free for Washington Software Association Members, \$10 for non-members. Directions: From the Eastside, take 520 west to the 108th Ave. exit. From Seattle take 520 east to the Kirkland exit. Both groups then turn right on Northrup Way and then left on N.E. 33rd Place. Turn left again into the first parking lot. The WSA's offices are located in the lower building.

#### Future DUG meetings

Friday 11th August, Inverness, 2-5pm DataEase Network Tips & Tricks

Wednesday 20 September London, 2-5pm

Using Data Model Manager to build Version 5 applications

Mon 30-Tues 31st October 4th European Conference

Commonweath Institute, London THE big event of the year! Touch base with hundreds of other DataEase users DataEase User Group meetings are interesting, stimulating, fun and, most of all, free to DUG members.

- Learn from invited speakers as they talk on a range of subjects
- Pack up your DataEase troubles in your old kit bag and bring them along — whether it's from the panel of experts or the person you sat next to, chances are you'll get that problem cleaned & ironed out
- · Swap experiences with others

Advanced booking essential. Call Marion Forsyth on 01603 762806. Fax 01603 762807.

The Dataease User Group. Keeping you in touch with the community of DataEase users.





**DataEase Express for Windows 1.1** 

#### **Genealogy Programme**

Does any user of DataEase for Windows have a tried and testing application for the complication of family history data? Please reply to Alan Wheway.

Fax: (01934) 635927

This space from around

 $$150^{00}$ 

To sell your products and services to the international DataEase community, call Adrian Jones today on:

- Tel: +44 (0)1603 762806
- Fax: +44 (0)1603 762807
- CompuServe: 100143,1025
- Internet: 100143.1025@compuserve.com

Dialogue Classified
Advertising is the cost-effective way to reach those people to whom DataEase matters.

# Developers

Two useful utilities:

Investigator will read any 4.x application and provide you with cross-referenced data dictionary, DQL form and field analysis, entity relationship diagram and menu tree. (£65)

Distributor will write your installation DIN files, and assemble suites of installation and upgrade files. (£25)

**Custom Defined Functions:** 

We will write those vital CDFs for you for moderate fees.

Ring for a quote with no obligation

Neville W Richards 18 Waltham Rise, Melton Mowbray, LE13 1EJ 01664 68335 **Special Deal:** 

\*\***\*\$75**\*\*\*

# Yourselves

That reader over there is working hard in the medical world, tracking how new drugs are developed. This one has a wonderful new system to ensure that the removal company doesn't lose your furniture. Another is after efficient food processing. A fourth has their eye on the books in the library.

But whatever they're doing, they're all doing it with DataEase. They've

chosen DataEase because they believe it can deliver top quality information management, solutions quickly and easily.

And they're also reading this magazine.

So, if you have an add-in product to sell, are looking for new staff or a new job, for some expertise in a particular area or someone to train your employees, reach the DataEase community.

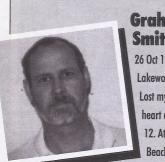
Advertise in Dialogue.

Call Adrian Jones on +44 (0)1603 762806 for more details.

DIALOGUE

the *International* DataEase magazine





Graham C.
Smith was "born
26 Oct 1949. Raised in
Lakewood California.
Lost my father to a
heart attack at age
12. Attended Long
Beach City College

with a major in

Microbiology. Two days after graduation, I got my draft notice. I arranged to go in to the Army as a three-year volunteer rather than a two-year draft in exchange for a guarantee of schooling.

"Upon completion of Basic Training, I was selected to remain in San Antonio, Texas (many of my class went to Viet Nam). I stayed on as an Instructor, one thing lead to another and I spent twenty years in the Army. I picked up a lot of computer-related stuff (99% self taught) and became known as a computer "expert".

"I was stationed in Germany with Phil Winkler. When he got ready to retire, he asked if I wanted to take over his job. I was transferred stateside to be the main Admin guy at the Armed Services Blood Program Office, which was charged with the responsibility of managing the World Wide Military Blood Program. During that time I was introduced to DataEase 2.5.

"When I retired three years later, I moved to Wilmington, Delaware and joined Phil. The following year Phil, Debe (Phil's sister), and I officially became PLM Consulting, Inc. The rest, as they say, is history."

What was your favourite subject at high school?

I liked most of the Sciences. The best single class I had was a college Quantitive Analysis (Chemistry) class. The professor took us way beyond the basic and allowed us to get into some real interesting theory.

#### What so you read?

A lot of Sci-Fi and Fantasy. The current series of books is about a 20th century man and wife who find themselves in 14th century England — only this England has real Dragons and Magic. Very bumorous as well.

What is the best film you've seen recently?

"Jurassic Park" just blew me away with its special
effects, but "Dances with Wolves" was the best overall.

# Query By Example

#### **GRAHAM C. SMITH**

Name a piece of music that stirs you?

- I particularly like Gustov Holtz , "The Planets". Full of images. But for a song to get me going, I'll take
- Queen or ZZ Top.
- What is your favourite kind of food?
- I love all types of seafood. There are times I would kill for a really good fresh New England lobster!
- Name an artist you have hung on your walls.

  I have some of my own photographs on my walls.

  How's that for vanity?

What is your favourite place?

- In the house the bedroom. I like to sleep.

  In the world 30' under water on a reef.
- If you didn't live where you live, where would you live?
- · The best city I ever lived in was Wiesbaden,
- Germany. I doubt I would care to move back there
  but I might like to visit again.
- Who's the sexiest person in the world?
- Anyone how answers this question with anything other than "the person I am dating/married to/living with" is asking for trouble. Since I am single and unattached I can say I don't know I haven't met them all yet.

What car do you drive?

I have a 1993 Honda Del Sol. A small two seater convertible. It's not the fastest thing around but it bandles like a dream.

- Name one thing you wish had never been invented?
- I sometimes think that we would be a lot better off if
  no one had invented fire.
- Name a gadget or piece of equipment you couldn't be with-
- Other than my computer, I can live without most gadgets. Except of course my car, and my stereo, and ... Oh, forget it. I want them all!

What is your biggest influence?

The people I have known and worked with. There have been about five people I have know that have had a significant impact on me. Others were in the right place at the right time to influence me at a crucial moment.

- What's the best thing you've done with DataEase?
- I helped develop a very complex Product Order
- Fulfilment system. The fellow who owned the company
   had been told by his peers (AS400 types) that it could-
- n't be done on a PC network. We proved them wrong.

What do you most like to change about the PC Industry?

I'm tired of an industry driven by marketing. After the

Lotus 3 debacle, the industry sould have learned. It seems

that all the wrong people are out there leading the parade.

What else is your favourite software?

Norton Commander. It is an ageing DOS shell that I would be hard pressed to live without. I have tried dozens of replacements but have yet to find its equal.

- What is the most unusual job you have ever done?
- I created a database for a man to track his collection
   of music and cross index it by artist, composer, etc. I
   sold him a computer, printer, DataEase and the program (six hours work). It did everything he wanted.
  - Name a bad habit.
- Smoking. I used to smoke two+ packs a day but I quit. Now it seems, everyone I know smokes but me.

Name a luxury you enjoy.

This year, my partners and I bought a beach house in Dewey Beach, Delaware. During the winter, it's very quiet. But in the summer, it's Rock and Roll!

- Name a sport/hobby you take part in.
- I'm not much of a sportsman. I love to SCUBA dive,
- · but my sinuses don't. My main sport these days is
- leisurely bike rides at the beach.

# Application Charter



The next release of Application Charter will be available soon with many of the additional features

you have asked for.

An upgrade for only £99 will be available.

Application
Charter is truly
INDISPENSABLE
for anyone
SERIOUS about
DataEase
development

Lee Padron,
International
Computer
Systems,
Snellville, GA

### **BUY NOW! OFFER ONLY WHILE STOCKS LAST**

A DataEase application is built of many, separate parts. Forms. Sub-forms.

Procedures. Menus. How how do they all fit together?

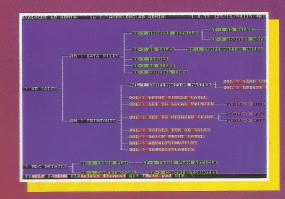
You can sketch out your application on paper. Or you can use Application Charter for an at-a-glance view.

Then explore deeper with a set of powerful analysis tools.

Find virtual, underived fields. Check on reserved words in field names and required fields without help. Search through DQLs for variables, commands, comments and inconsistencies. Do you have forms

that are never used and should be deleted. Or hidden away in your menus, a form or procedure you haven't yet written.

Get right inside your application and find out what's really going on.



### Application Charter. Look deep into the beart of your system

For more details contact:

North America: Lee Padron at International Computer Systems, 3255 Brownwood

Drive, Snellville, GA. Tel: (404)-979 4147. CompuServe 76675 3101

For sales outside North America: **Kevin Cullum**, at The DataEase User Group. Tel:
+44 603 762806. Fax +44 603 762807.
CompuServe 100143,3465. Internet: kevin@techarts.co.uk

For a free working demonstration, look in the Third party add-ins library on the CompuServe DataEase forum.

Demo Disk Available Call for details



# Assisted passage with Migration Charter

re you moving your applications to DataBase version 5 ?

Well DataBase have made the migration process very simple but even so, before you migrate an application its a good idea to prune and prepare.

What about all those little changes you've made over time? Maybe they've left one or two redundant forms and procedures and possibly a couple of menus as well,. And of course there are always those relationships that seem to multiply by themselves.

In even quite modest applications finding all these bits and bobs is not as easy it sounds.

Migration Charter is a specialised version of Europes best selling DataEase Analysis tool, Application Charter.

Migration Charter's features include:

- Checking for duplicate forms, menu and procedure names;
- Identifying QBE's that should be converted to full DQL's before migration;
- Checking for extended ASCII characters which will not migrate successfully;
- Checking all fields; searching DQL's for the output & message commands;
- Scans produced in Application
   Charter and Migration Charter
   are fully compatible;
- Many tips specific to your application;
- Identifying possible redundant forms and procedures.

Migration Charter produces a schedule of warnings and tasks to be undertaken before migration.

To place your order or to receive further information on Migration

Charter please contact Kevin Cullun

Tel +44 (0)1603 762806

Fax +44 (0)1603 762807 Compuserve 100143,3465

£79 to DataEase User Group Members £99 to Non-Members + VAT & carriage